Volume 20 Number 3, Spring 1999

Med. Serials

BMC

Journal of the Canadian Health Libraries Association

Bibliotheca Medica Canadiana

Le journal de l'Association des bibliothèques de la santé du Canada

- CHLA/ABSC Response to Advisory Council on Health InfoStructure
- CHLA/ABSC Resource Sharing Task Force 2 : Survey Results
- CISTI's National Online Scientific Knowledge Network
- The Hamilton-Wentworth Long Term Care Resource Centre
- SEARCH : Swift, Efficient Application of Research in Community Health
- Alberta's Health Knowledge Network
- CMA's OSLER Service
- CNA's Canadian Nursing Knowledge Network
- CCOHTA : Canadian Coordinating Office for Health Technology Assessment
- OHeLP : Ontario Health Link for Practitioners
- Forging a New Model for Cooperation : The Health Science Information Consortium of Toronto
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BIBLIOTHECA MEDICA CANADIANA

The ***Bibliotheca Medica Canadiana*** is a journal providing for increased communication among health libraries and health science librarians in Canada. A special commitment has been made to reach and assist the worker in the smaller, isolated health library.

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La ***Bibliotheca Medica Canadiana (BMC)*** a pour objet de permettre une meilleure communication entre toutes les bibliothèques médicales et entre tous les bibliothécaires qui travaillant dans le secteur des sciences de la santé. Nous nous engageons tout particulièrement à atteindre et à aider ceux et celles qui travaillent dans les bibliothèques de petite taille et les bibliothèques relativement isolées.

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Editor's Message

Anna Gagliardi

It seems that all types of organizations want to merge: banks, car producers, even political parties in Canada. Like it or not, the trend is real and it is spreading. As a recent movie marketing strategy claimed, "size does matter".

This issue of ***BMC*** focuses on regional and national networks, collaborative projects, and partnerships. As you will see, there are benefits associated with the joining of forces amongst health information providers, including shared information resources and technology networks; integration of services; shared licensing agreements; heightened purchasing power; improved communication; a stronger, more united voice and the ability to reach a larger, dispersed and diverse clientele.

Representatives of the Canada Institute for Scientific and Technical Information discuss their proposed Scientific Knowledge Network. This ambitious, exciting project fits with the recommendations, which are summarized in this issue, submitted by CHLA/ABSC to the Advisory Council on Health InfoStructure. The CHLA/ABSC Task Force on Resource Sharing 2 (RSTF2) provides us with an overview of resource sharing in Canada based on their 1997 survey of the CHLA/ABSC membership.

As examples of regional partnerships, we will learn about plans for a Long Term Care Resource Centre in the Hamilton-Wentworth area, future directions for the Health Science Information Consortium of Toronto, and how cancer patients are becoming more involved in their care due to implementation of the P.O.W.E.R. Surfers Web site.

Moving to the provincial front, fellow health librarians from Alberta provide an update on the Health Knowledge Network, and the Swift, Efficient Application of Research in Community Health (SEARCH), while colleagues from Ontario describe the development of OHeLP, the Ontario Health Link for Practitioners.

Establishing networks at the national level are the Canadian Medical Association (Osler Service), the Canadian Nurses Association (Canadian Nursing Knowledge Network), and the Canadian Coordinating Office for Health Technology Assessment (Canadian Health Technology Assessment Network).

The importance of accessing and using high quality health care information, the cornerstone of each of these networks and partnerships, is highlighted in an article about the need for evidence.

This issue of ***BMC*** will satisfy those with an interest in consumer health information. It contains a summary of feedback to a survey of Canadian consumer health libraries on their use of electronic information, an update of activities at the Canadian Health Network, a recommended core list of consumer health books in the Consuming Health Information column, and a review of the book ***Consumer health resource centers : a guide to successful planning and implementation***. Two additional books are reviewed -- ***Our promise to children*** and ***Clinical ethics : a practical approach to ethical decisions in clinical medicine***.

The Cyberpulse column will help you use the Web more efficiently and the DOCLINE column will answer the question, *What are the DOCLINE quarterly statistics?* ***BMC***'s assistant editor provides us with recent tables of contents from ***Health Libraries Review*** and ***Bulletin of the Medical Library Association***, as well as current news of interest to health librarians and information providers.

My work with ***BMC*** is really enjoyable, largely because of the opportunity to make new acquaintances with colleagues, albeit electronically. This editor-author relationship is also a partnership: we work together to create ***BMC***, along with the Assistant Editor and the CHLA/ABSC Secretariat.

I'm very pleased with the number of individuals willing to share information about their work and encourage all readers to consider submitting articles, however brief, for the next two issues on electronic information resources (submit by March 19) and administrative issues (submit by June 4). ■

A Word from the President

Marthe Brideau

Hello from Sherbrooke! As you can see, there is a big change in my professional life! When you read this, I will have started my new job as head of the Health Sciences Library at the University of Sherbrooke. I replace Germain Chouinard who is now enjoying a well deserved retirement.

I will not tell you about all the ups and downs of my moving on January 1st, 1999. I could because it is related to the theme of this ***BMC*** issue which is about cooperation and regional and national networking. Moving requires a lot of cooperation and a good network of relatives and friends. One must use his or her contacts to the maximum. Let me tell you that it is something to move a complete family, especially when you have been living at the same place for more than 15 years. It was not the best idea to move during my mandate as President but I had to seize the opportunity offered to me.

The adventure started at the ASTED Conference in November 1998. I was attending a meeting of our brand new chapter, the ASTED Section-santé. The meeting was really productive. I am very happy to announce we have decided the ABSC/CHLA 2001 Conference will be held in Québec City with the cooperation of ASTED. It will be co-chaired by Carole Brault and Ginette Langevin. This coincides with the 25th anniversary of our association. The first meeting took place in Montréal under the direction of David Crawford. It will be another good reason to celebrate!

The year 2000 is approaching. Given that the year 2000 is the year of the dragon in the Chinese horoscope, *Demystifying the dragon : strategies for 2000 and beyond*, will be the theme of the year 2000 MLA-CHLA/ABSC joint conference in Vancouver. Joanne Marshall will be the co-chair and George Beckett, Tom Flemming and Jim Henderson will provide her with assistance.

We have reached the final stages of preparation for the 1999 Conference entitled, *A bridge to the new millenium : Un pont vers l'an 2000*. After having seen the preliminary program, I can tell you that you will be happy to be part of this Conference. You have challenges to face but it is also very important to find out what the future holds for you. A pleiad of lecturers will help you focus on the many issues related to health information. Learning more about these issues will help you to meet the challenges and adopt strategies for building the bridge that will lead you into the new millenium.

All the team members of the Maritimes Chapter have done a good job under the direction of the Co-chairs, Betty Sutherland and Darlene Chapman. We look forward to seeing you in Halifax, Nova-Scotia, from May 25 to 29, 1999 for a very exciting Conference! Why not take the opportunity to apply for the CHLA/ABSC Twentieth Anniversary Professional Development Grants? These grants are designed to help our members benefit from professional development activities. The request for funds should be presented at least six weeks before the activity.

The conferences are only a few of examples of your association's activities. Of course, none of the activities of the association could take place without a good regional and national network. That is why it is important to be a member and a participant in your professional association, CHLA/ABSC. Your membership gives you many advantages. Our profession has been able to survive many changes, for example work restructuring, budget cuts and employment cut-backs, that took place in the past few years, thanks to an attitude of cooperation.

We learned a long time ago to support each other and share our resources. We are people who like our work and who are proud of the success of our colleagues. By sharing our successful or difficult experiments in the numerous fields of documentation, we are helping other information professionals. There is always someone that you can count on in your regional or national network. This is a remarkable characteristic of our profession because it is not to be found everywhere else. Each member is important and that makes our network strong. The librarians are here to help the users, of course, but also to help each other! Keep up the good work!

The CHLA/ABSC Board met in Hamilton on October 16 and 17, 1998. We are preparing for the meeting that will also be held in Hamilton, February 6-7, 1999.

In closing, I would like to wish you, in this last year before the new millenium, much happiness and good health! ■

A Note of Gratitude to Parke-Davis

CHLA/ABSC gratefully acknowledges the donation of $500 from Parke-Davis, a division of Warner Lambert *[http://www.parke-davis.com/index.html]*. CHLA/ABSC has approached a number of pharmaceutical organizations to supplement the funds obtained through membership fees and purchase of the Benchmarking Tool Kit. This money will be directed to the CHLA/ABSC Development Fund.

The Fund was created in 1993 to support initiatives proposed by chapters and individuals. It provides a tangible way for the Association to foster growth at the local level. For application procedures please refer to the annual Directory or the CHLA/ABSC Web site *[http://www.med.mun.ca/chla/* OR *http://www.med.mun.ca/absc/]*.

Un Mot de la présidente

Marthe Brideau

Bonjour de Sherbrooke! En effet, comme vous pouvez le constater, il y a de gros changements dans ma vie professionnelle! Quand vous lirez ce message, j'aurai débuté mon nouvel emploi comme responsable de la bibliothèque des sciences de la santé de l'Université de Sherbrooke. Je vais remplacer Germain Chouinard qui a pris une retraite bien méritée.

Je ne vous raconterai pas toutes les péripéties de mon déménagement (le premier janvier 1999!). Je pourrais car cela coïnciderait avec le thème de ce numéro de ***BMC*** qui traite de la collaboration et du réseautage régional ou national. Quand on déménage, cela prend beaucoup de collaboration et un bon réseau de parenté et d'ami(e)s. Il faut utiliser ses contacts au maximum. Laissez-moi vous dire que c'est quelque chose de déménager toute une famille, surtout quand cela fait plus de 15 ans que vous résidez au même endroit! Ce n'était certainement pas une très bonne idée de changer d'emploi pendant mon mandat de présidente mais il fallait que je saisisse l'occasion quand elle se présentait.

Toute cette histoire a débuté au Congrès de l'ASTED auquel j'ai assisté au début novembre 1998. J'ai participé à la réunion de notre tout nouveau chapitre, soit la section-santé de l'ASTED, et cette réunion a été très fructueuse dans tous les sens du terme. Je suis très heureuse de vous annoncer qu'il a été décidé que le Congrès 2001 de ABSC/CHLA, avec la collaboration de l'ASTED, aura lieu dans la ville de Québec sous la coprésidence de Carole Brault et Ginette Langevin. Ceci coïncide avec le 25^{e} anniversaire de notre association. La première réunion avait eu lieu à Montréal sous la direction de David Crawford. Ce sera donc une autre occasion de célébrer!

L'an 2000 s'en vient à grand pas et étant donné que, dans le calendrier chinois, cela se trouve à être l'année du dragon, *Demystifying the dragon : strategies for 2000 and beyond*, sera le thème du congrès conjoint MLA-ABSC/CHLA de l'an 2000 qui aura lieu à Vancouver en mai 2000. Joanne Marshall en est la coprésidente; George Beckett, Tom Flemming et Jim Henderson vont lui prêter main-forte.

Les préparatifs pour le Congrès 1999, *Un pont vers l'an 2000 : A bridge to the new millennium*, vont bon train et, après avoir vu le programme préliminaire, je peux vous affirmer que vous allez être content de vous y être inscrit. Venez créer des liens avec l'avenir malgré les défis importants que vous aurez à relever. Une pléiade de conférenciers vous aideront à vous concentrer sur de nombreuses questions relatives à la santé et à l'information en matière de santé que vous devrez examiner si vous voulez être en mesure de relever ces défis et d'adopter des stratégies pour construire le pont qui vous mènera vers le nouveau millénaire. Toute l'équipe du chapitre des Maritimes a fait un travail formidable sous la coprésidence de Betty Sutherland et Darlene Chapman. On vous attend donc du 25 au 29 mai 1999 à Halifax en Nouvelle-Écosse pour un congrès des plus excitants! Pourquoi ne pas profiter de l'occasion pour présenter une demande pour une bourse de perfectionnement professionnel du 20e anniversaire de l'ABSC/CHLA. Ces bourses ont pour objectif d'aider nos membres à participer à des activités de perfectionnement professionnel. La demande de fonds doit être présentée au moins six semaines avant la tenue de l'activité.

Les congrès ne sont que quelques exemples de collaboration auxquels participent votre association. Bien entendu, toutes les activités de l'Association ne pourraient avoir lieu sans la présence d'un bon réseau que ce soit au niveau régional ou national. D'où l'importance d'adhérer et de participer au sein de votre association professionnelle qu'est ABSC/CHLA. Votre adhésion vous procure des avantages importants. Si notre profession a pu survivre à tous les changements tels que la réorganisation du travail, les restrictions budgétaires, les réductions de postes, etc. qui se produisent depuis un certain nombre d'années, c'est bien grâce à notre esprit de collaboration. Depuis bien longtemps, nous avons appris à nous soutenir et à partager nos ressources. Nous sommes des gens qui aiment beaucoup leur travail et qui sont très fiers du succès de nos collègues. Les expériences vécues avec succès ou difficultés dans les diverses activités de la documentation sont partagées et profitent à d'autres professionnels de l'information. Il y a toujours quelqu'un sur qui vous pouvez compter. Ceci est remarquable dans notre profession. Nous ne trouvons pas cela partout et, bien entendu, c'est ce qui fait la force d'un bon réseau étant donné que chaque membre a son importance. Les bibliothécaires sont là pour aider les usagers naturellement mais aussi pour s'entraider mutuellement! Continuez votre beau travail, il ne faut surtout pas lâcher.

Les réunions de votre Conseil d'administration ont eu lieu à Hamilton les 16 et 17 octobre 1998 et nous sommes actuellement en train de préparer les prochaines qui auront lieu au même endroit les 6 et 7 février 1999.

En terminant je désire vous souhaiter en cette dernière année du millénaire beaucoup de bonheur et de la santé en quantité! ■

CISTI Proposes a National Online Scientific Knowledge Network

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Introduction

The Scientific Knowledge Network (SKN) is a proposed network of networks intended to link people and technology. By coordinating existing and future electronic information resources and services, SKN will provide timely and relevant access to the scientific, technical and medical (STM) information and expertise required by innovators. SKN would be a fundamental element in the development of the Canadian knowledge-based economy.

The National Research Council (NRC) has adopted SKN as a major strategic initiative in its mandate to support the industrial and research communities and small and medium sized enterprises in Canada, designating the Canada Institute for Scientific and Technical Information (CISTI) as its managing organization. With strong ties to other government organizations, research institutes, universities, industry, publishers and information brokers, CISTI is in a very favourable position to assume this coordinating role.

The ultimate goal of the Scientific Knowledge Network is to convert information into knowledge that can be employed by researchers and innovators participating in the Canadian innovation system.

The ultimate goal of the Scientific Knowledge Network is to convert information into knowledge that can be employed by researchers and innovators participating in the Canadian innovation system. These include entrepreneurs, industrialists, scientists, investors, public servants, and members of the informed general public, who constitute the market for innovations in our current economy, and who may become the innovators of the future. A recent Statistics Canada study estimates that about 92,000 innovative companies presently conduct research in Canada, and that many more are innovative without investing in formal research.

The Scientific Knowledge Network is conceived not only to address the opportunities and technology-innovation requirements outlined above. It should revolutionize the Canadian innovation process.

The keys to the success of SKN are cooperation and coordination. SKN will also depend on harmonizing the networks of information that already exist in Canada and on the development of new more powerful electronic access tools to facilitate use of the vast quantity of ever increasingly available STM information.

Context for SKN Development

SKN is well aligned with efforts by the federal government to promote a more innovative economy through investments in people and technology. Knowledge-based growth has emerged as a key theme in the Minister of Industry's agenda for "Connecting Canadians", a strategy to make Canada a world leader in developing and using an advanced information infrastructure to achieve social and economic goals in the new knowledge economy.

The World Economic Forum ranks Canada as having the strongest technology potential of all the G7 countries in this regard. Canada already enjoys the highest home computer, cable and telephone penetration of the G7 nations, and among the lowest telephone and Internet charges. The Information Highway Advisory Council, CANARIE, the Canada Foundation for Innovation, and several government departments are working to reinforce and promote the development of infrastructure, content and a conducive regulatory environment. Canada also has a well-educated workforce which could exploit the advantages that a scientific knowledge network would offer.

Consultation

There are numerous potential SKN shareholders and partners whose cooperation could contribute to the success of the initiative. A preliminary consultation document that set out background information and summarized the SKN proposal was circulated among selected libraries, research information providers, publishers, competitive intelligence professionals and representatives of the communications sector. Initial responses were favourable. Advice concerning probable interest from likely client groups was

also sought through discussions with those already directly involved in serving clients through CISTI, the Canadian Technology Network (CTN), the Industrial Research Assistance Program (IRAP) and the NRC research institutes.

A number of SKN design decisions were made as a result of these preliminary consultations and the constructive criticism received. The SKN will:

- interface with client groups by increasing the number of people supporting the network,
- form industry and research subject-specific teams by joining the expertise of scientific, technical, business and information specialists,
- form partnerships to facilitate the pooling of financial and information resources,
- invest in smart information access and management tools,
- promote and support increased connectivity between information sources and distribution nodes, and
- develop service elements along sector lines.

The process of increasing value employs information specialists, and scientific, technical and business experts, to create products that contain only the most relevant and useful information.

The SKN Concept

SKN will connect existing scientific, technical and medical information networks, both human and computer, to create an efficient information flow. It will build on existing networks, adding information and links.

SKN will provide access to electronic information from an enhanced digital science library that organizes and delivers information through subject-focused building blocks called BiblioNets. A BibioNet is a one stop electronic source of worldwide information, including databases of high quality, customized content and expert contacts, developed for, and with the research community in a particular sector of the economy. The first BiblioNet was designed for the information technology and telecommunications sector and was launched in January of 1999. Access to SKN will ensure that client needs are satisfied, whether by direct computer connection or through a human interface. Intended as more than a library, SKN would add value to information.

Although many networks and electronic data sources already exist, SKN would expand the amount of available information and expert advice provided to innovators. Under a structured program, with appropriate funding, SKN will seek the cooperation of the owners of data and information sources to provide links to their resources, enhancing the interface between clients and sources of information and expertise.

SKN will implement a series of new service, access and infrastructure elements. New service elements reflect the three stages of information flow: gathering information and making it accessible; adding expert knowledge to create new knowledge and connecting experts to the information made available to clients. Each of these service elements will be supported by the development of advanced tools to access, search and retrieve information. The proposal recommends incremental development, including implementation of a formal technology and administrative infrastructure.

Access to Scientific, Technical and Medical (STM) Information

Access to existing collections of information must be secured at an affordable price and without unreasonable restrictions. Extensive partnering, coordination and cooperation will be required to increase the amount of STM information readily available to innovators and researchers, and to provide access across Canada. Several major tasks have been identified in this regard.

1. Creation of a National Digital Science Library

The National Digital Science Library would provide access to electronic STM publications and other relevant electronic material. One approach would be to negotiate expanded licenses with individual publishers of electronic journals and reference tools.

Phase 1
Increase the number of licenses to electronic journals and reference tools that presently support NRC researchers and expand them to include all government scientists.

Phase 2
Work in concert with Canadian university research libraries to extend these licenses and create controlled links to existing regional licenses.

Phase 3
Expand partnerships to permit licenses to cover college and public libraries.

Phase 4
Enhance licenses to cover anyone accessing the SKN from a Canadian-domain Internet address.

2. Development of new BiblioNets to support key sectors

As Web-based information products, BiblioNets provide fast and easy access to selected information from STM and related business sources worldwide.

Phase 1
Design and launch BiblioNets for the health, environment, and communications sectors.

Phase 2
Introduce BiblioNets for manufacturing and biotechnology.

3. Digitizing grey literature

Grey literature is printed information that is not formally published or commercially available. It often represents the most recent developments in a subject.

Phase 1
Initiate a pilot project to create a full-text database of all NRC publications for which NRC holds intellectual property rights, including all technical reports and documents originating in the

research laboratories. These are already being indexed and catalogued by CISTI in the NRC Publications Database.

Phase 2
Establish electronic links to all STM information in digital form that originates in the federal government, and encourage other government departments to continue their own digitization programs, to catalogue and index their electronic information, and to link these catalogues and electronic sources to SKN.

Phase 3
Encourage other research organizations to adopt similar practices.

Enhancing the Information

The process of increasing value employs information specialists, and scientific, technical and business experts, to create products that contain only the most relevant and useful information. Information may also be analyzed to answer specific client intelligence needs, develop trend or forecast projections, and assist in risk and liability assessments. Value may be added reactively, in response to client requests, or proactively, to meet the perceived requirements of a client community.

4. Technology Watch

The SKN proposes to incorporate "Technology Watch" as an element by which value is added to information, thereby converting it to knowledge. Technology Watch units will be staffed by sector-oriented teams assembled from experienced scientific, technical and business personnel. Products and services will include technology trend reports, competitive intelligence reports and technology-related advice.

Phase 1
Establish Technology Watch teams in key sectors, for example, the environment and manufacturing, with research, technology, business and information expertise to provide STM intelligence services to innovative Canadians firms. Link these with the new BiblioNets, and identify and develop specific information products such as competitive intelligence reports, targeted to those innovative companies that are in a position to benefit from the intelligence provided.

Phase 2
Identify additional key sectors, for example, biotechnology, construction and communications, and create new Technology Watch teams, products and services.

Connecting To Clients

The client interface, or point of contact with a client, should be a person with enough expertise to understand client needs. This contact point may be face-to-face, by telephone or on the Internet.

5. Expansion of NRC regional presence - CISTI

This element will expand existing NRC/CISTI information centres and add new centres to support individual regional innovation systems.

Phase 1
Add five new NRC information centres at key locations across the country.

Phase 2
Create CISTI franchises in partnership with key stakeholders.

6. Expansion of NRC Regional Presence - Industrial Research Assistance Program (IRAP)/Canadian Technology Network (CTN)

Building on existing NRC/CISTI/IRAP/CTN networks, new staff will be added and charged with specific responsibilities for promoting SKN.

Phase 1
Expand the IRAP and CTN networks, to improve client awareness and access to STM information and knowledge in the environment and manufacturing sectors.

Phase 2
Expand the IRAP and CTN networks, to target the construction, communications and biotechnology sectors.

Strategic Infrastructure

To carry out the foregoing elements it will be necessary to purchase and, in some cases, to develop the software tools for organising, accessing and analysing information, as well as the connectivity to deliver it.

7. Access, search and retrieval

SKN will support information specialists and their partners in the Canadian information technology industry in efforts to build new and more powerful tools to organize, retrieve, analyze, filter and deliver the vast quantity and variety of information that will be the content of the Network. The National Digital Science Library, BiblioNets, the Digitization of Grey Literature, and Technology Watch elements depend on the ability to search for and access information held in many different digital formats.

Open systems and interoperability are fundamental to the success of these elements. The necessary tools and applications to be developed to meet client requirements and the elements noted above include:

- a new search engine,
- metadata handling applications,
- semantic indexing,
- knowledge navigators,
- data mining capabilities,
- new digitization technologies,
- new supporting databases.

To enable direct and interactive communication between SKN contact representatives and their clients, applications such as video conferencing and Internet telephony need to be implemented.

8. Technology support

SKN is a complex system composed of many technology-intensive and interdependent components. An overall technology strategy must be developed to ensure that SKN objectives can be achieved within defined time frames. Although some technology-related activities are intrinsic to particular elements, general existing technology infrastructure, including network support and the information and application architecture of major SKN members such as CISTI and IRAP, was not built for initiatives such as SKN.

To support SKN, the present infrastructure will therefore require re-engineering. Changes and transition must be managed carefully to ensure continuity of current operations and services.

9. Broadband connectivity

The effectiveness of SKN depends heavily on broadband connectivity to pool and share large volumes of information among SKN partners and clients. Such connectivity would permit direct and interactive communication among SKN personnel, and between SKN clients and their SKN contacts, through technologies such as video conferencing and Internet telephony. Ideally, broadband connectivity should be established for as many SKN members and clients as possible through coordination, promotion and financial as well as non-financial assistance.

SKN will build on existing national and regional infrastructure and will use a phased approach to achieve its goals for broadband connectivity. Partners and clients will be encouraged to allocate funds to upgrade their network connection. A budget has been recommended to coordinate broadband activities, to assist in establishing broadband connectivity, and to help resolve any 'last mile' bottleneck problems for SKN participants.

Phase 1
Project start-up, planning and high level design, technology evaluation, plan and start pilot project, establish broadband connectivity by using SKN budget to accomplish 20% of tasks for LAN-based partners and 10% of tasks for non-LAN-based clients.

Phase 2
Conclude pilot projects, and accomplish an additional 30% of tasks for LAN-based participants and 35% of tasks for non-LAN-based participants.

Phase 3
Complete planned tasks for all categories.

10. Management infrastructure

SKN is a complex project that requires the cooperation of many players who will be sharing resources, responsibility and risk. The key partners, including IRAP, must therefore be involved in the strategic planning of the network and its elements. Appropriate administrative support will be provided to manage the SKN initiative and to coordinate its various activity streams.

The overall success of SKN depends on the degree of cooperation and support received from partners.

Conclusion

The costs associated with SKN have been scaled to meet fiscal realities and the ability of the scientific community to adapt to the changes it will bring. The proposed business plan estimates the total cost of the project over three years to be $24 million. Additional contributions may be leveraged through partner participation in particular elements of the SKN project. Sources for such funds could be programs like the Canadian Foundation for Innovation or CANARIE.

The overall success of SKN depends on the degree of cooperation and support received from partners. Ultimately, interest and commitment will be measured in the number of participants, financial contributions and in-kind support.

CISTI proposes to build SKN as an 'information foundation' or 'knowledge platform' for all Canadian STM efforts to secure a healthy, national economic future. To remain competitive, SKN must be extremely dynamic, evolving continuously as technology progresses.

CISTI welcomes comments about the Scientific Knowledge Network proposal. Please address them to Kenneth-Roy Bonin, CISTI, Tel (613) 990-8872 or kenneth-roy.bonin@nrc.ca ■

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The Hamilton-Wentworth Long Term Care Resource Centre Project

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Background

As the new century approaches there is a growing emphasis on greater efficiency in practice with more accountability and the demonstration of better patient outcomes. Evidence-based health care is becoming a recognized criterion for standards of excellence that can be applied across health care settings. There is also a growing expectation that patients and their families should be meaningfully involved in clinical decision-making.

Information technologies developed in the last few years can provide clinicians and clients with swift access to evidence to support their clinical decisions. However, clinicians in different disciplines and specialties have unequal access to high quality information. While caregivers working in large, acute care hospitals may have access to libraries stocked with printed resources and electronic databases and staffed by professional librarians, those in small or rural hospitals and community agencies lack these advantages. In particular, caregivers and clients in long term care institutions have traditionally lacked good information resources, and the skill and motivation to exploit existing resources to improve clinical decision-making.

There is ... a growing expectation that patients and their families should be meaningfully involved in clinical decision-making.

In the Hamilton-Wentworth region, representatives from community-based and institutional long term care settings have recognized the need for information resources to support clinical decision-making in long term care. They have made plans to establish a Long Term Care Resource Centre, staffed by a professional librarian, who will help agency staff to obtain research evidence, evidence-based clinical guidelines, and other information resources to support clinical decision-making and research. The librarian will also play a role in educating users in managing, assessing and applying information to practice.

In the future, clients and their families will obtain information from the Centre to help them play a greater part in decision-making about their care. This article briefly explains why long term caregivers require better information resources, and describes a study commissioned to establish the feasibility of a Long Term

Care Resource Centre that will provide such resources in Central West Ontario.

Why long term care providers need more and better information resources

In long term care agencies the potential for integrating best evidence into clinical decision-making is only beginning to be realized. Access to appropriate information, the knowledge to manage and apply it, and the time and opportunity to integrate new knowledge into practice are the major challenges that clinicians must meet if they are to incorporate best evidence in their practice.

Surveys of nurses in hospitals (1,2) and community agencies (2) in Ontario showed that while larger hospitals have libraries and electronic databases, smaller agencies have limited printed resources and lack access to online databases. Clinicians in long term care agencies experience additional problems. Little research has been carried out on topics of interest to clinicians in this specialty. Long term care organizations are generally small and do not support research. Traditionally staff did not consider research a priority and based their clinical decisions predominantly on experience and expertise. This situation is gradually improving. The trend toward an older population, as the baby boomers age, is leading to more emphasis on effective and efficient care for seniors. Research on key issues in gerontology is also increasing (3). However, access to new research is not easy. There are no databases dedicated to long term care and MEDLINE, the database of the United States National Library of Medicine, contains limited information on this topic. There is also the challenge of obtaining quality information. The Internet is increasingly a source of information on a variety of topics relevant to clinicians and their clients. Brown (4) suggested that although 10% of the information available on the World Wide Web pertains to health care, it is of variable quality.

There are no databases dedicated to long term care and MEDLINE, the database of the United States National Library of Medicine, contains limited information on this topic.

Staff in long term care agencies often lack the information management skills to access, evaluate and use existing resources effectively. Courses in information management are rarely available. Because many agencies lack educators and research committees, clinicians are not made aware of how research should inform practice. Mitchell et al. (2) indicated that among agency nurses, only community health nurses made substantial use of research to guide practice. A recent survey of health care agencies in four communities by Royle et al. (5) suggests that while some teaching hospitals are beginning to use information technology to increase research utilization and are providing staff with opportunities for education in evidence-based practice, smaller agencies have often not done so. Teaching information management skills is a special challenge for long term care faculties. The majority of staff are para-professionals or non-profes-sional workers. Some have relatively low educational levels and for others English is a second language (6). However, it is important that they too are well informed. Innovative educational strategies are required.

It has been argued that clinicians are doers who have little time for reading and sifting through information from clinical research.

Finding the time to utilize information is problematic for all health care workers. It has been argued that clinicians are doers who have little time for reading and sifting through information from clinical research. Clinicians need information during the limited time available to make a specific clinical decision. If information is not available during this 'decision-moment' then the decision will be made without it. If skilled information professionals can make use of modern information technology to help clinicians to obtain information in a timely fashion this information bottle-neck can be avoided.

The use that care providers make of their time is influenced by institutional and professional values. Literature reviews by Funk et al. (7) and Dobbins, Ciliska and DiCenso (8) indicate that the organization is the most important facilitator or obstacle to using research evidence in practice. There is evidence that a supportive management enables care providers to integrate research into practice (9). In Hamilton-Wentworth, long term care organizations have shown that they are ready to support staff in their efforts to base clinical decisions on the best evidence by giving their full support to a Long Term Care Resource Centre.

To make the most of available resources, and to create new resources specifically designed for health care providers in long term care, it is essential for long term care organizations to collaborate and to pool skills and resources. Regional institutions that broker information supporting evidence-based practice are an effective and efficient way of sharing knowledge (10). Specialty resource centres staffed by librarians with expertise in relevant literature, such as that proposed for Hamilton-Wentworth, have the potential to address many of the problems associated with using information in clinical decision-making. They can improve access by:

- pooling the resources of local organizations and purchasing shared resources,
- improving the information management skills of health care providers through direct instruction and collaboration with agency educators,
- providing quality information to patrons in a timely manner,
- supporting research and integration of research into practice within member agencies and
- becoming part of a network of individuals and organizations, nationally and internationally, who have interests and expertise in long term care.

In Hamilton-Wentworth, the Central West Public Health Unit Library Network (11) provides a model for a Long Term Care Resource Centre which will specialize in brokering long term care knowledge and information for health care providers in long term and chronic care. When the time comes to include the consumer, the experience of the Consumer Health

Information Service at St. Joseph's Community Health Service, Hamilton will also prove helpful (12).

The Long Term Care Resource Centre feasibility study

A first step in planning the new facility was commissioning a feasibility study to assess what information resources related to long term care were available and what additional resources and skills health care providers in the organizations needed. The objectives of this study were to:

- determine the existing information services available to staff in the participating organizations and in the wider community,
- determine the information requirements of staff in the participating organizations and their perceptions of the strengths and weaknesses of their current access to information,
- determine the need for skill development in information literacy, i.e., how to access, re-evaluate, and use information for program development and care delivery,
- prepare an interim report outlining the current situation and defining the basic requirements for access to information resources and
- prepare an analysis of alternative models for providing information resources related to long term care, including the estimated start-up and operational costs, benefits and limitations (6).

What information resources are available?

Most of the 15 regional organizations surveyed had small libraries, comprising 200 to 250 items including books, video and audio tapes and fewer than 10 journal subscriptions. Usually the library was accommodated in the manager's office although a few had separate space allocated. Only four libraries had catalogued their collections and one had a librarian on staff. Internet access was available in 11 agencies though it was not always available to all staff. The number of Internet workstations ranged from one to five and were most commonly located in a manager's office. Staff also had access to the Internet from home computers.

The largest collection was held by a chronic care institution. This organization had the only library with access to electronic databases such as MEDLINE, CINAHL and AGELINE on CD-ROM and other online resources. It was staffed by a full-time librarian and a clerical assistant, was a member of the local health library network, and provided services such as literature searches, distribution of journal table of contents pages, photocopying, personal notification of items of interest and interlibrary loans.

Some staff at long term care organizations in the region made use of resources in the community. The Health Sciences Library at the university was mentioned by all organization representatives and was used by staff who were also faculty, students or alumni. Three organization representatives mentioned that they used MEDLINE and CINAHL through databases at the university Health Sciences Library or, when time was an issue, asked a librarian to carry out a search. The community college library was also used by those taking courses and the libraries of the larger long term and community service organizations were also accessed. Specialist collections owned by such agencies as the Alzheimer Society and the Diabetes Association were important resources for specific information. Staff occasionally made use of the local public library, the government library and other hospital libraries.

Dissemination of information occurred through a number of channels. All agencies provided in-service training and this was the most frequently mentioned source of information to staff. However, education budgets varied and were very low in some agencies. Staff also attended external workshops. Informal networks, both internal and external to the agency, were important information sources. Serving on committees, having student placements and participating in research projects were also factors that facilitated the flow of information. Representatives of five organizations mentioned an in-house learning resource centre. Less frequently mentioned were audiovisual materials, personal subscriptions, association memberships and staff newsletters.

What information management skills do staff now have?

Half of the agency representatives said that their staff were not information literate. Others suggested that some department heads and RNs had information management skills. One representative noted that nurses who graduated with a BScN in the last five years had computer skills and had studied critical appraisal of the literature.

Representatives of all the organizations saw evidence-based practice as a goal but indicated that there were barriers to realizing it. Staff did not have the time to access, critique, and apply information. Furthermore, agencies could not afford to acquire resources such as journal subscriptions, services such as interlibrary loans, or searches carried out by librarians. It was difficult to finance and schedule training time for staff, many of whom were shift workers. Training for workers with limited formal education and for whom English was a second language presented particular problems. Some staff worked in the community in comparative isolation from co-workers. Representatives also thought that some staff would resist a change that involved greater use of information and information management skills.

... it is essential for long term care organizations to collaborate and to pool skills and resources.

To what extent do existing resources satisfy information management needs?

The information supplied by organization representatives provided evidence that useful sources of information already existed in the community. Representatives believed that these resources and the strategies already developed for exploiting them had potential for development. The community also had a history of networking that could be a basis for future collaboration. The board/owner and management of local long term care organizations were committed to education and understood the link between education and quality care. It was evident that much remained to be done. There were differences among organizations related to access to information and libraries differed in the degree

that they satisfied local needs. Barriers to the effective use of information included lack of time to find information, difficulty in quickly accessing information, the cost of acquiring information, lack of appropriate information resources, lack of skills for finding and evaluating information, and difficulty making information available in a form useful to staff with limited formal education.

What additional resources are needed by staff?

To meet the challenges of enabling the staff of long term care organizations to use information effectively, a number of goals must be met. Clinicians need to have high quality information on long term care available to them. They need to be able to access this information during the 'decision moment' when care is being planned. They must be able to acquire information management skills so that they can find information themselves or instruct information brokers to find it for them. To provide access to adequate information for their staff, long term care organizations need to share their resources. Sharing would require access to one another's library collections, collaborating in educational enterprises, and sharing the costs of information resources, technology, and personnel. The investigators discovered that most local organizations strongly supported a Long Term Care Resource Centre and though a few added the caveat that the service would have to meet their needs, most were willing to provide financial support.

How can the Long Term Care Resource Centre best be operationalized?

Organization representatives proposed that to make the best use of existing resources and expertise, the Long Term Care Resource Centre should be established at the one organization that already had a library, a librarian and clerical support. The Centre would maintain its staff and employ additional clerical support. The librarian would develop expertise in the specialist area of long term care and build a core collection of key resources, as well as acquire information from other libraries and electronic sources. To better coordinate regional resources the librarian would establish a long term care database that would include the information resources of all participating agencies. The Centre would be accessible to frontline staff and management and ultimately to volunteers, clients and their families. Information could be acquired efficiently from this single source during the 'decision moment'. Besides providing information, the librarian would cooperate with educators to refine strategies for providing staff with information management skills such as accessing information, critical appraisal and application of research findings in clinical decision-making.

Three models for the governance and management of the Long Term Care Resource Centre were considered: a contractual model, a consortium model and a mixed model. In the contractual model, the Centre would operate as a business, providing services to each organization under contract. The contract would specify basic and additional services to be received by an organization and the cost of those services. Management decisions would be handled by the manager of the Long Term Care Resource Centre and the parent body with input from customers.

In the consortium model, the participating organizations would own and manage the Long Term Care Resource Centre. Decisions would be handled by a management committee that would meet frequently. The full participant group might meet once or twice a year. The consortium would define the services to be provided and categories of membership could be identified to link costs to the size of the participating organizations.

The mixed model would consist of a core group of organizations forming a consortium that would sell services to agencies who might not wish to be full members. These organizations might form an advisory committee to ensure that their needs were met. Only consortium members contribute time and financial resources. Smaller organizations would be able to select services without investing substantial time and resources. A Long Term Care Resource Centre Working Group is now being formed to develop plans for the Centre and to determine the best model for the expected users.

Conclusions

The needs assessment survey of local long term care organizations indicates that considerable information resources related to long term care are already available in the community, but they need to be coordinated for effective access. This can best take place in the one organization already equipped with a library and managed by a librarian. Centralization will reduce unnecessary duplication if the librarian compiles a shared database and coordinates a policy for sharing documents. He or she can also negotiate the joint acquisition of useful resources.

The Resource Centre can act as a single information source for clinicians who must seek answers to clinical questions beyond their own organizations. They can draw on the expertise of the librarian for searches and suggestions for finding information and they can receive information through email, fax and/or courier within a specified time. Having better access to more resources will enable clinicians to use information in decision-making. Through asking questions of the research literature, they will also be able to work with the librarian to identify gaps in knowledge. They may then become motivated to remedy these gaps by pursuing research projects. The resources of the Centre and its ability to draw on external resources will be crucial to any research enterprise.

The Centre should become a major node, directing the flow of information within a local network of users and between local and more inclusive networks. As well as drawing on resources outside the region, the librarian will be able to collaborate with colleagues in other libraries specializing in long term care to lobby for or develop needed resources such as databases specializing in or serving the needs of clinicians and consumers in long term care. ■

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Swift, Efficient Application of Research In Community Health (SEARCH)
An Alberta-Made Health Research Training Program

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Introduction

In 1996 the Alberta Heritage Foundation for Medical Research (AHFMR) developed a program called "Swift, Efficient Application of Research in Community Health" (SEARCH).

As in other Canadian provinces, Alberta's health sector was restructured in the mid-1990s, creating Regional Health Authorities (RHAs) that are responsible for service provision in certain geographic areas. Health professionals in the regions were asked to make decisions about local health issues. In response to this scenario, AHFMR, in consultation with the RHAs, the Provincial Mental Health Advisory Board (PMHAB), and the Universities of Alberta and Calgary, initiated the SEARCH program. The program is intended to increase the capacity for health research in the province, and to improve the dissemination and utilization of health research information.

The specific goals of the program are to:

- encourage health professionals in the RHAs and agencies to use current, relevant, and appropriate information to assist in identifying priority health issues and in making decisions on these issues based on research results,
- develop a collaborative network of expertise across Alberta to initiate and carry out health research on a local, regional, or provincial basis,
- create a culture in which policy-responsive research is both valued and supported, and
- formally evaluate the program.

Program Description

In May 1996, the first SEARCH Program (SEARCH I) was initiated. The program included twenty-five health professionals, policy-makers, and administrators from Alberta Health, the PMHAB, and most of the province's RHAs. It lasted for two years and included seven weeks of in-person training for the participants. A more detailed program description is available from the Program's Web site [*http://www.ahfmr.ab.ca/search.html*].

All participants were involved in at least one individual and group research project, the topics of which included telepsychiatry, early maternity discharge, falls in the elderly, health indicators and community development. The training, delivered over the first twelve months of the Program at different locations across the province, covered such topics as literature searching, research dissemination, health informatics, epidemiology and statistics, qualitative research methods, and program evaluation. Perhaps the most significant and lasting aspect of the training program was the strong network that developed amongst the Program's participants, coordinators, and faculty. This network was fostered through the use of innovative information technologies. SEARCH I concluded in the Spring of 1998. It was considered a success by all participants who supported another training program.

SEARCH II began in May 1998 and will continue to May 2000. Twenty-five individuals are participating in this program which, this time, also includes family physicians. The training sessions occur, as with SEARCH I, during the first twelve months of the program.

Technology remains a key component for information access and communications. The information technologies that have been used in both SEARCH I and II include:

- *CLINT*: This desktop information integrator was used by the program evaluators to capture usage data about the software tools and information resources to which participants had access during SEARCH I.
- *eCLINT*: eCLINT is an online information architecture used as the model for SEARCH II Web development. Whereas SEARCH I focused on organizing the participants' resources at the desktop level, SEARCH II focuses on a simple desktop with extended information resources provided via the Web. The eCLINT site includes tips of the day, communications links, Web mail, curriculum outlines and content, feedback mechanisms, evaluation outcomes, research resources, links to MEDLINE and other bibliographic databases, a project database, and technical support. Development over the next few months will focus on expanding the online curriculum.
- *Surveyor*: This online evaluation tool was used to perform a baseline assessment of the participants' characteristics. Participants also use it in workshops to evaluate the training sessions. This allows the evaluators to provide almost immediate feedback to the trainers, therefore it has been very well received. The results are also electronically fed to an external evaluator as part of the overall SEARCH II evaluation.

- *HIREx*: This software is used to maintain a Web-accessible project database and inventory.

Librarians have been involved in SEARCH I and II in a variety of roles. Given the current health care focus on evidence-based practice and policy, accessing and appraising existing research information plays a significant role in the Program. The participants have twice rated the literature searching training session, delivered by librarians from the University of Alberta's John W. Scott Health Sciences Library, as one of the most valuable training sessions in the program. Health informatics, communications technology, and evidence-based practice are consistently popular topics with the participants, despite the diversity of professions participating in the Program.

More specifically, librarians in the Program have been involved in the following areas:

- bibliographic/Internet search training and support,
- informatics training and support,
- online education (e.g., SEARCH of the month),
- project database and Web site maintenance and support,
- communications facilitation, and
- project coordination.

Outcomes

As SEARCH II is an ongoing project it is still being assessed by the external evaluator. However, I have seen positive feedback from participants. Informatics training in particular seems to be necessary and well received. As with SEARCH I, the main strength of the current program is the network itself. Networks form around specific projects and topics, for example, SEARCH II includes a client satisfaction research group who communicate via a SEARCH newsgroup, email and NetMeeting, and who meet face to face only at the training sessions in Banff. Interaction among the participants is ongoing through email.

The level of satisfaction with SEARCH II remains high at the half way mark. Some feedback has indicated that the program sometimes has more of a clinical focus than is useful to some of the participants. As with any training program, a key challenge is delivering training that is relevant to groups that are in many ways quite different: community development people vs. family practitioners, policy makers vs. community health workers, varying levels of education and backgrounds, rural and urban practitioners. Even some of the generic tools, for example, statistical techniques, qualitative research methods, and particular bibliographic databases are more relevant to some groups within SEARCH than others.

It is impossible at this point to say how, or even if, the behaviour of participants has changed. This assessment is being conducted at the time of writing (January 1999). Some members of the SEARCH I group continue to be active in health research in the province. Others, largely due to the pressures of their workplaces, have not been able to protect research time and have not been able to stay active in this regard. However, applications of new skills acquired through SEARCH are being applied in their day to day work activities. The overall impression is that the networks formed by SEARCH I and II continue to be valuable, and now we are seeing the beginnings of linkages between the two SEARCH groups.

Discussion

SEARCH is unique in that it is provincial in scope and is a widely collaborative effort. The closest formal educational training programs in Alberta are the Master of Public Health (health research) and MSc (community health sciences) offered by the Universities of Alberta and Calgary, respectively. It is not surprising that the faculty for SEARCH are largely drawn from Public Health and Community Health Sciences departments offering these degrees. Programs of this nature will become increasingly important as workplaces demand specialized and customized educational opportunities for their employees outside of traditional academic frameworks.

SEARCH I and II have been largely successful. Groups as close as British Columbia and as distant as the United Kingdom have displayed interest. The program delivers training that is very practical and focuses as much as possible on one clear goal: increasing the research capacity of the province of Alberta. The Universities, RHAs, PMHAB, and AHFMR are to be commended for their foresight in establishing such a program. ■

Author Information

Richard Thornley *is a Project Manager for InfoWard Inc., currently managing telecommunications and informatics training for a community health research training program, an evidence-based practice research project, and a primary health care team development project focusing on care maps for diabetes and osteoarthritis. He graduated in 1993 with an MLIS from the University of Alberta and is currently working on a Master of Public Health degree in the area of health policy and management.*

Sharon Read *has a varied background in health with major intersts in the public health/community health and adult education areas. Sharon was Executive Director of the Health Unit Association of Alberta prior to becoming the Director of Special Projects and Coordinator of the S.E.A.R.C.H. Program at the Alberta Heritage Foundation for Medical Research, where she developed the innovative S.E.A.R.C.H. Program. Presently, Sharon is the Chief Operating Officer, Community Development, Provincial Mental Health Advisory Board, where she is continuing her interest in promoting health research.*

Alberta's Universities

Leaders in Moving Health Information into the Professional Community

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Introduction

The Health Knowledge Network (HKN) is a collaborative venture of the University of Calgary (UofC) and the University of Alberta (UofA). These two universities work together to:

- provide information services to the campus user groups (faculty and students at UofA and UofC) and
- extend services beyond the campuses into the health care communities in Alberta and the Territories.

In this way, HKN has become a regional network and is viewed as a model for partnerships in other institutions and provinces.

In the early 1990's, the medical librarians at the partner universities identified an increasing need to provide information services in the teaching hospitals around the province. As part of the health care education programs, students were being taught to use databases and other information resources. When these same students went out into the various hospitals around the province for practicums and residency programs, they no longer had consistent access to the information that they had been taught to incorporate into their work. To fill this gap, the medical librarians at the UofC and UofA developed the Health Knowledge Network. HKN enables the libraries to:

- visibly contribute to the broader mandate of the academic communities by readily sharing their rich resources with the community at large and
- actively support health education programs and research conducted at remote locations throughout the region.

Scope of Activities

The scope of HKN activities has now grown beyond its early implementation stages. Efforts are now directed towards adding value to the service and reaching the late-adopters of network-based information.

HKN is a complete information service supporting the practice of evidence-based medicine. HKN offers new users a complete cycle of training, access to bibliographic and full-text databases, and document delivery services. HKN services include:

Training

Basic and advanced level training sessions and customized courses focused on specific needs or subject specialties. These courses are delivered on or off the campuses, often in conjunction with the Continuing Medical Education of the UofC and UofA.

Access to databases

From the Internet, individual and institutional customers can search databases available from the campus networks. The trusted and sophisticated OVID search interface is used to run the system. While high-end researchers continue to use the text-based version of OVID for speedy response times, most users have migrated to the friendlier, state-of-the-art OVID Web interface.

The basic suite of databases available to all HKN users is MEDLINE, CINAHL, HealthSTAR and CANCERLIT. PsycINFO and EBMR (Evidence Based Medicine Reviews) are added to database menus on a customized basis. Additional OVID databases, for example EMBASE and BIOETHICSLINE, are available to campus users at the UofA.

HKN's value as a buying group is well recognized by the administration of each university and by user groups throughout the province. While partnerships require changes in thinking and working, there is real value to be found in working together to create weight behind negotiations for database licenses.

Document Delivery

HKN's document delivery service is focused on individual customers or institutions without a library. While many fortunate health professionals have affiliations allowing them to benefit from interlibrary loans, HKN meets the needs of those without easy access to a library. The UofA and UofC possess exceptional library collections and it is through HKN that the universities ensure that everyone in the region can share in this wealth of information resources.

Benefits

Throughout the province of Alberta, HKN provides services to hospitals, community care clinics, community colleges and technical institutes, and to organizations such as the Workers' Compensation Board and the Alberta Cancer Board. HKN's prevalence in the province has created a continuity of access to health information as professionals move between institutions. HKN also provides a 'buying group' for the negotiation of database licenses. Recent market research has confirmed that HKN is a valuable part of everyday library collections in the province. Several libraries have cancelled various print and CD-ROM subscriptions because they have greater access through HKN. In addition, feedback from librarians and health professionals, most notably physicians, confirms that the external community values the relationship with a familiar, credible organization such as their local universities.

Future Directions

HKN's focus is now directed towards adding value to the services currently provided and to reaching further into rural communities. While our urban centres have enjoyed the benefits of HKN since its inception, technological barriers have hindered our rural colleagues. In the last year, the technical infrastructure for several of the regional health authorities has become current and rural health professionals are eager to tap into the resources provided by this collaborative venture. ■

Author Information

With past experience in corporate information centres, market research and online systems, ***Della Jacobson*** *is currently the Marketing Manager for the Health Knowledge Network. She obtained an MLIS from the University of Alberta in 1991 and was a participant in the first Northern Exposure to Leadership Institute in 1994. Della is past President of the Northern Alberta Health Libraries Association (1998), Library & Information Studies Alumni Association (1996), and the Greater Edmonton Library Association (1994).*

Un mot de reconnaissance Parke-Davis

L'ABSC/CHLA accuse réception d'un don de 500 $ de Parke-Davis, qui est une filiale de Warner Lambert (*http://www.parke-davis.com/index.html*), et elle l'en remercie. L'ABSC/CHLA a contacté bon nombre d'organismes pharmaceutiques pour accroître les fonds recueillis avec les adhésions et acheter la trousse d'étalonnage. Cet argent sera injecté dans le Fonds de développement de l'ABSC/CHLA.

Le Fonds a été mis sur pied en 1993 pour soutenir des projets proposés par les chapitres et les membres. Il fournit des moyens concrets à l'Association pour favoriser sa croissance au palier local. Pour se renseigner sur les procédures de présentation d'une demande , veuillez consulter l'Annuaire ou visiter le site Web de l'ABSC/CHLA (*http://www.med.mun.ca/absc/* ou *http://www.med.mun.ca/chla/*).

The Canadian Medical Association's OSLER Service

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Introduction

In the late spring of 1996, the Canadian Medical Association (CMA) underwent a major corporate reorganization. Information Services, comprising the T. Clarence Routley Library, the Gordon S. Fahmi Archives and the Corporate Records unit, was placed in the newly created Professional Development Directorate. This assignment signaled a departure for Information Services whose sole function, until that time, had been to serve the in-house information needs of the Association. The Professional Development Directorate already included the publishing arm of CMA, its Web development team, Accreditation Services and Professional Programs. While our mandate to serve Association staff continued, we began to explore new opportunities in the areas of professional development and continuing medical education for CMA members.

A project team was formed with responsibility for developing a new, member-only section for CMA's Web site, CMA Online [*http://www.cma.ca*], complete with a free MEDLINE service. The idea was based on the very successful Free MEDLINE Service offered by the Library at the British Medical Association (BMA) to its members since 1993. Using OVID Technologies' interface, the BMA service is accompanied by full search support and document delivery to over 11,000 members (1). A comparable free MEDLINE service for CMA members would support a number of the Association's key strategic objectives including continuous learning and medical education, support for rural physicians, as well as evidence-based learning and practice.

The Trial

In August of 1997, a trial service was launched. Four hundred members were selected randomly and sent invitations to participate. While we attempted to include representation from across the country, a heavy proportion of trial participants were located in British Columbia and Ontario, reflecting perhaps a higher concentration of Internet users in those provinces. In order to join the trial members had to complete an electronic questionnaire. The questionnaire was designed to assess the perceived value of the service to our members. In addition, we wanted to establish some benchmarks with regard to our members' level of Internet competency, their clinical information needs, their general knowledge of database searching and experience with MEDLINE and MeSH (the National Library of Medicine's Medical Subject Headings) in particular. In exchange for this information, members were given access to MEDLINE, AIDSLINE, CANCERLIT and HealthSTAR through the OVID gateway plus technical and search support for a three-month period. At the end of the trial, participants were asked to complete a second questionnaire. The purpose of this questionnaire was to obtain further information from participants about their experience using the service, and any input which would enable us to identify required improvements or modifications. Overall, trial users were extremely enthusiastic about the possibility of a free MEDLINE service.

Of particular note was the value they attached to the support they received. Two needs were clearly identified (and for which we continue to receive requests): a document delivery service, preferably in electronic format, and end-user training.

The OSLER Service is Launched

In March of 1998, the Canadian Medical Association launched the OSLER Service for its members. OSLER, or OVID Search Link to Electronic Resources, was named for Sir William Osler, the eminent 19th century Canadian physician, clinician, researcher, bibliophile and one-time CMA president.

A major issue surrounding the launch was the creation of an online registration process by which members could register for the newly created member-only section of CMA Online and receive a user name and password which would give them ongoing access to that part of the site. The process had to allow users to register simply and efficiently. It also had to provide a high level of security which was required for other member-only products, notably, the new financial services offered by the CMA's wholly-owned subsidiary, MD Management. After considerable work, patience, and no small amount of diplomacy, the project team arrived at a process that satisfied all stakeholder requirements.

In the seven months since the launch, over 3,500 members have registered to use the service. Calls to the support desk continue to increase with the increase in registered users. Requests for search assistance have more than doubled since March 1998 and weekly downloads from the OVID FTP site continue to show increased searching activity. During the month of October 1998, the total number of searches doubled each week.

Support is the Key

The decision to use the OVID Technologies software for CMA's OSLER service was based on our belief that it is a superior search interface. The combination of user-friendly, intuitive search screens and a powerful search engine are a great benefit to our members. No matter how good the software, however, we believe that the success of our service ultimately depends on the support and encouragement provided to our users. To this end, much time, energy and resources have been invested in developing our support and training functions.

The position of OSLER Support Librarian was created. An experienced clinical librarian was hired and given responsibility for managing the support desk and providing assistance to members using the OSLER service. Direct access to the support desk is

available through a 1-800 number and an e-mail address. As well, on each page within the OVID interface, the "Ask a CMA Librarian" link enables members to send a message to the support desk along with their search strategy, so that they can obtain help at any point during their search. Support desk staff will review a client's search strategy, suggest other possible approaches to the search, explain details about MeSH and the OVID interface, as well as conduct searches for those who are less inclined to do their own searching.

A technical support desk was established and staffed by an information technology specialist to complement the assistance provided by the OSLER Support Desk. The Technical Support Desk is responsible for assisting members with any technical problems they encounter with the registration process including downloading security software, as well as more general problems associated with their modems or browsers, etc. A close working relationship between this desk and the OSLER Support Desk has proven invaluable in terms of client service and support.

We have also explored other opportunities for user training and support. A quick reference card was developed and is sent to each newly registered user. Regular articles in the *On the 'Net* column of ***CMAJ*** (***Canadian Medical Association Journal***) featuring search tips and techniques, along with general information about the service, have proven to be an effective means of reaching our users, not to mention, marketing the service (2). Registration and usage statistics, along with calls to the support desk, show a marked increase following the publication of each article. We attend various medical society and association meetings to interact with our users and further promote the service.

Hands-on, classroom training is another important vehicle for supporting our users. Next to requests for document delivery, users request training more than any other service. Prior to the launch of OSLER, we had already created an infrastructure for a series of Internet training courses for physicians named Doctors on the 'Net. We subsequently developed a second course on searching the OSLER service. Three pilot sessions were held in Ottawa during October 1998. All three workshops were well attended by physicians who were keen to develop their searching skills.

Conclusion

As a strategic plan is developed for the coming year, we have begun to consider ways in which we can strengthen and build upon the OSLER service. Many opportunities and challenges lay before us. As already mentioned, most of the incoming requests are related to document delivery. Our own library collection is not sufficient to support such a service therefore we are exploring various document delivery options. Our goal is to identify the most cost-effective and seamless way to assist our clients with their document delivery needs.

It is also our great ambition to hold Osler training sessions across the country. Certainly there is much interest and need, however, Canadian geography makes a national training program very challenging, not to mention expensive. We are examining different options for delivering our courses, from a traveling road show to teaching partnerships with health science librarians across the country. Over time, we see the possibility of developing additional courses in such areas as intermediate and advanced search skills and evidence-based medicine strategies.

In the meantime, the enthusiasm of our members has been gratifying and has more than compensated for the many long hours and hard work invested into this project. Within the CMA, the OSLER project has raised the Library's profile tremendously and helped to illustrate and reinforce the skills and expertise that librarians can contribute to the work of the Association, particularly in the development and support of research and Web-based information products.

For further information about any aspect of the OSLER MEDLINE service, please do not hesitate to contact Deborah Scott-Douglas or Deidre Green (800-663-7336 x2255, e-mail: *cmalibrary@sympatico.ca*). ■

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Author Information

Deborah Scott-Douglas *has been Manager of Information Services at the Canadian Medical Association since 1994. In addition to the responsibility of providing reference and research services to Association staff, she is currently working on the development and delivery of a number of new Web-based information products and services for members. Prior to her appointment at the CMA, she worked in both special and academic libraries including the Winspear Business Reference Room at the University of Alberta and the Whipple Library for the History and Philosophy of Science and Medicine at the University of Cambridge, England.*

Developing A Nursing Knowledge Management System

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Introduction

Over the last few years, Canada's health care system has been through many significant changes. Hospital stays are shorter. Care is now delivered in many new settings, such as in the home and in the community. Technology has permitted new and innovative approaches to providing care. Health care needs are more complex. Patients are more involved in decisions about their health. Health care professionals are at the forefront of the changes making sure they are well-prepared to meet the health needs of Canadians. At the same time, each profession must continue to prove their contribution to the health care system.

Registered nurses value the trust of Canadians. Our mission is to advance quality nursing care in the interest of the public. A large part of this goal is to develop a strong role in information and knowledge management in support of nursing practice.

The Canadian Nurses Association (CNA) is part of an exciting new national project to create a virtual nursing knowledge network. This project hopes to provide nurses with access to data, information and research findings, which can influence policy and be applied to nursing practice.

Moving Away From Traditional Library Services

In order to move forward with the creation of a comprehensive Canadian Nursing Knowledge Network (CNKN), we have reallocated resources away from our traditional library services. Unfortunately, this has meant a downsizing of staff and a reduction of services. Last fall, the library at CNA House ceased its reference and lending services, and started to examine the possible range of services required by members in the future.

Plans include the creation of a reading/resource room featuring our current holdings. An archives advisory committee has been struck to review opportunities for the current archives collection, including an interest expressed by the Canadian Museum of Civilization.

The advisory committee will develop policies and practices to ensure professional control over archival materials, access to those materials, appropriate conservation of materials, a long-term acquisition plan and a plan for long-term sustainment of nursing history collections.

Naturally, some groups are concerned about these changes. We appreciate that change is difficult, and we take very seriously the views of our members. We encourage them to continue to provide us with feedback, as the project unfolds.

CNA's Moral Commitment

At the November CNA board meeting, directors unanimously agreed upon some principles to guide deliberations about CNA archival and historical collections. Those principles clearly state that CNA values the artifacts reflecting nursing history, CNA corporate documents, CNA's unique collections, and gifts presented or bequeathed to CNA. This moral commitment also extends to items that can be tied to the unique character and evolution of Canadian nursing as a profession, practice and discipline.

It was further agreed that, in seeking agreements and partnerships with external agencies, CNA will require assurance and agreement that collections are maintained, enhanced, and accurately portray the image of nursing and nurses, and that items will be maintained in perpetuity.

The ultimate goal, as mentioned previously, of our movement to a Canadian Nursing Knowledge Network is to provide nurses across Canada with more information, in an accessible and cost-effective manner.

We are excited by this initiative as it puts CNA, and RNs, in step with the future. We are also pleased to have Market Link, a leading-edge systems and consulting company, to assist with this most ambitious undertaking.

A People-First Approach

We are impressed by Market Link's 'people first' approach, and the first phase of this project will be to define the target audiences, their characteristics, and their information needs. To do this, Market Link have met, and will continue to meet with CNA staff, board and associate/affiliate members, individual members and other stakeholders to define the objectives and activities of the Network.

To build consensus around a framework for the CNKN, Market Link has completed a policy document that incorporates the goals, activities, target groups and components of the CNA.

The document outlines the core values and vision of the CNKN, underlining the value CNA places on its historical roots in service and professionalism and its commitment to evidence, progress and learning. "The [Canadian Nursing Knowledge Network] will provide tools to enable CNA, and the profession of nursing in Canada, to become more effective and will enable CNA's many partners to join each other in a common vision," according to the policy document.

Closely linked to CNA's mission statement, CNKN's mission is to provide the knowledge management system for the profession of nursing in Canada, and to enable the advancement of the quality of nursing in the interest of the public.

Nursing Benchmarks

The success of the CNKN will be closely tied to, and measured by, the extent to which it enables the following outcomes to be achieved by CNA and the nursing profession:

- More effective clinical practice, and in particular, evidence-based nursing brought into clinical practice;
- Stronger recognition of nurses as knowledge workers, as measured by certification, higher and continuing education, respect from other health professions and public;
- More impact on the health of Canadians through successful advocacy on major policy positions;
- A stronger health system through the deployment of a human resources strategy to promote leadership and excellence in the development and maintenance of quality nursing knowledge workers.

The document also defines the concept and components of a knowledge management system, as well as the target groups, the methods and processes of evaluating the CNKN, and the centre's activities.

We believe that the Canadian Nursing Knowledge Network will lead to greater use of nursing knowledge and research by all nurses across Canada. By using the technology available to us, we can create an accessible, leading edge Network.

We look forward to building positive momentum for the Network over the coming months. With this project we hope to provide the kind of knowledge management system that will enable registered nurses to do their jobs better and faster. This will be accomplished by providing them with the information they need, when needed, and by ensuring that nursing is an evidence-based profession – a profession that will be increasingly visible and valued in the future. ■

Author Information

Mary Ellen Jeans, *Executive Director of the Canadian Nurses Association since February 1996, has practised as a staff nurse, researcher, educator and administrator. She has served as Director General, Extramural Research Programs Directorate, Health Canada; McGill University's School of Nursing Director; and Associate Dean of Nursing in the Faculty of Medicine. She obtained her RN from Hamilton Civic Hospital and earned a Bachelor of Nursing, a Master of Nursing and a Doctorate in Psychology from McGill University. A recipient of many awards, Dr. Jeans has participated on nearly 40 university, hospital, research, national and international committees, has lectured across the world and has written extensively in the area of pain management.*

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Introduction

In December 1989, the federal, provincial and territorial ministers of health announced the creation of the Canadian Coordinating Office for Health Technology Assessment (CCOHTA). It is a non-profit corporation based in Ottawa that receives funding from the thirteen provincial governments. CCOHTA was established "to provide information on emerging and existing health care technologies to decision makers, and to facilitate the exchange and coordination of information on health technologies."

Health technology assessment (HTA) is the process of evaluating medical technologies, including drugs and their use. Our researchers synthesize and critically evaluate the available information on medical technologies. This information may include data on costs and utilization; studies of clinical effectiveness, cost effectiveness and quality of life; and discussions of social and ethical issues.

CCOHTA's two professional librarians play a vital role in all aspects of the organization. As members of the research team, they provide knowledge and expertise to the project director and other research associates in database selection and online searching of bibliographic databases, Internet and print resources. They offer document delivery of articles as well as the acquisition of elusive but valuable grey literature. The librarians are involved in searching for, and establishing contacts with, experts in government, hospitals, academic and research settings. They provide additional support through the writing, editing and publishing of reports.

Approximately ten drug studies are undertaken each year, some of which are researched and written by CCOHTA staff, the remainder of which are commissioned through a Request for Proposal (RFP). Library staff are involved in the commissioned studies to a lesser extent than those studies undertaken in-house, but they do provide the intial database searches and acquisition of journal articles which are used to determine the parameters of the RFP. Several non-drug assessments are also performed each year. These are mostly conducted by staff researchers although it is possible that some may be commissioned in the future.

CCOHTA's two professional librarians play a vital role in all aspects of the organization. As members of the research team, they provide knowledge and expertise to the project director and other research associates in database selection and online searching of bibliographic databases, Internet and print resources.

Partnerships

In 1998, a pilot project to produce several 'alerts' or short bulletins on new drugs and medical devices, was deemed to be a success. The Canadian Emerging Technology Assessment Program (CETAP) is now a permanent, ongoing project at CCOHTA, and involves one information specialist who regularly scans databases, news services and print sources for potential topics. When a topic has been selected, the information specialist works with a researcher to produce the bulletin.

The CETAP information specialist scans such resources as Reutershealth and Yahoo health, searches databases such as ***DIALOG***'s *Drug News and Perspectives*, *Drugs of the Future*, *Pharmaceutical and Healthcare Industry News Database* (*PHIND*), *EMBASE Alerts* and *Adis LMS Drug Alerts*, and reviews print resources such as the ***BBI Newsletter***, ***ECRI's Health Technology Trends*** and ***Pharmacoeconomics & Outcomes News*** to provide the researchers in charge of each topic with essential information.

The goal is to produce approximately six short (two page) bulletins a year that alert health care decision makers, at all levels, to emerging medical drug and non-drug technologies.

This emerging technologies program has recently been given more significant exposure on the international front as CCOHTA has become the first and, to date, the only North American Associate member of the European Information Network on New and Changing Health Technologies known as EUROSCAN.

Another exciting partnership was arranged at a meeting which took place during December of 1998. This partnership between CCOHTA's pharmaceutical researchers and the Department of Pharmacy, Ottawa Hospital, General Site will produce an annual list of new drugs that may be available on the Canadian market within the next 18 to 24 months. CCOHTA's information specialists will be working with their counterparts at the Ottawa General's Drug Information Center to regularly scan resources such as ***SCRIP***, the ***NDA Pipeline***, online databases, the Internet and selected print sources to compile an exclusive list of the top 25 to 50 drugs.

National Networks

CCOHTA, as part of its coordinating role, established the Canadian Health Technology Assessment Network (CHTANet) in 1995. The objective of CHTANet is to develop and maintain a systematic, effective and efficient program of government-funded health technology assessment in Canada.

Membership is available to organizations managing a structured programme of assessing health technologies such as procedures, devices and drugs. The organization receives the majority of its funding from provincial, territorial and/or federal government(s). The principal objective of the structured program is to generate and/or provide information on health technologies for use in administrative or clinical decision making.

Members of this network include CCOHTA, the Alberta Heritage Foundation for Medical Research (AHFMR), the British Columbia Office of Health Technology Assessment (BCOHTA), the Conseil d'évaluation des technologies de la santé du Québec (CÉTS), Saskatchewan's Health Services Utilization and Research Commission (HSURC), Saskatchewan Health, Acute and Emergency Services, Ontario's Institute for Clinical Evaluative Sciences (ICES) and the Manitoba Centre for Health Policy and Evaluation (MCHPE).

CCOHTA Library staff implemented and now maintain a listserv for CHTANet. Members use the list to share information about ongoing and upcoming research projects. Information specialists conduct searches and provide the results to their health technology assessment counterparts who do not have access to these databases. In this way, the information specialists serve to encourage collaboration between agencies and certainly help to reduce duplication of resources in agencies where those resources are already in heavy demand.

International Networks

CCOHTA is also active in two major international networks. The International Network of Agencies for Health Technology Assessment (INAHTA) was established in 1993 and includes 25 member agencies throughout the world.

The positive results of the collaboration between INAHTA member agencies were made clear with the 1996 publication of the reports resulting from the "INAHTA project on the effectiveness of bone density measurement and associated treatments for prevention of fractures." The reports involved five member agencies from Canada, Spain, Sweden and the United Kingdom and are proof of the quality of research reports which can be produced when members of international networks collaborate to address health issues that affect people all over the world.

The key to networking and collaboration is, of course, good communication. Several CCOHTA staff members, including our two information specialists, are participants in the recently created INAHTA listserv, which was created and is maintained by Dr. Ray Kirk, the Director of the New Zealand Health Technology Assessment agency. Its purpose is similar to that of CHTANet, but includes an international audience.

CCOHTA's information specialists are also involved with assisting the current Secretariat of INAHTA, the Swedish Health Technology Assessment agency (SBU), with the ongoing development of the INAHTA Web site.

The second major international network in which CCOHTA is active, the International Society for Health Technology Assessment in Health Care (ISTAHC), is largely composed of information specialists from the various member agencies including several Canadian health technology assessment agencies, the National Library of Medicine and health technology assessment agencies from around the world. The information specialists from CCOHTA belong to the Special Purpose Information Group on Information Resources (SPIG-IR).

The key to networking and collaboration is, of course, good communication.

The SPIG-IR was established in 1996 to:

- promote the development, use and evaluation of information resources for HTA;
- advise the Board and Staff of ISTAHC regarding the development and maintenance of the ISTAHC Web site; to contribute bibliographies and registries of contacts, suggest links to other HTA sites, list new publications and create a moderated IR listserv;
- inform ISTAHC members of new HTA information resources, and to provide this information to the National Library of Medicine and other relevant national and international organizations for collection development and inclusion in databases; provide suggestions to the NLM regarding changes and additions to enhance the MeSH vocabulary and the Unified Medical Language System (UMLS) metathesaurus;
- encourage the use of standard bibliographic formats, and the use and development of standards for HTA literature search methodologies.

To date, the SPIG-IR has held two meetings during annual ISTAHC meetings, and its value can be clearly seen in the much improved ISTAHC Web site. The next meeting will take place during the 15th Annual ISTAHC Meeting in Edinburgh, UK from June 20 to 23, 1999.

In an effort to be more proactive in the dissemination of CCOHTA information and reports, an Email Subscription Notification Service has recently been introduced to the Web site.

National Health Library Network

CCOHTA endorses the development of a national health information network and sent a letter, signed by our President, Dr. Jill Sanders, to Health Minister Allan Rock in support of Jim Henderson's proposal [*http://www.mls.cps.bc.ca/hlaa.htm#Contents*].

Although we currently have our own agreements in place to exchange information with providers of health information, for example, the Canadian Institute for Health Information (CIHI), the

Canada Institute for Scientific and Technical Information (CISTI) and Health Canada's libraries, we certainly agree with Joanne Marshall that the creation of HealthLINC is essential to acheiving equitable access to health information at a national level [*http://www.fis.utoronto.ca/people/faculty/marshall/nnhl/hcansia.htm*].

Future Plans

One of the most important roles of CCOHTA's Library and Information Services, in addition to providing support for research projects, is the ongoing development of a comprehensive clearinghouse of national and international health technology assessment reports.

We are currently assessing the need for a comprehensive database on CCOHTA's Web site which would require the cooperation of Canadian and international health technology assessment agencies. Ideally this database would include abstracts of reports by the members of CHTANet, INAHTA, and ISTAHC, indexed using MEDLINE and EMBASE subject headings so that the database is searchable by author, organization, title and subject. Hot links to the author agency will also be provided in each record so that the searcher may learn more about, or contact the agency. I believe that this database would be a valuable information resource to all who are interested in health technology assessment sources.

CCOHTA Web Site

The CCOHTA Web site [*http://www.ccohta.ca*] was developed and launched in June of 1995 and provides information about CCOHTA, its mandate, projects, and most importantly, CCOHTA reports. Most of these reports are available full-text in Portable Document Format (PDF) that can be easily downloaded using Adobe Acrobat.

In an effort to be more proactive in the dissemination of CCOHTA information and reports, an Email Subscription Notification Service has recently been introduced to the Web site. People are encouraged to "Stay Connected" to CCOHTA by adding their names to the service database. These individuals will automatically receive an email when a new bulletin or report has been published on the Web site. The e-mail message contains a hypertext link to the file on the CCOHTA Web site for easy downloading.

The creation of the Web site and subsequent dissemination of CCOHTA's reports using this vehicle has certainly increased our profile around the world. At last count the Web site had been accessed by over 69 different countries, evidence of a very positive contribution to the sharing of information in the field of health technology assessment.

The quality of information provided by the CCOHTA library in support of health technology assessment research, both internally and to our many HTA partners, depends on our willingness to actively participate in knowledge-sharing partnerships with national and international organizations. We are setting up new partnerships with more 'local' players, such as our recent liaison with the Pharmacy Department of the Ottawa Hospital to produce an Emerging Drug List on an annual basis. Hopefully this trend will continue and benefit all concerned. ■

Author Information

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OHeLP : Ontario Health Link for Practitioners

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Background

Access to health care information in support of evidence-based clinical practice and continuing education is a major concern for health care practitioners outside large urban health centres, for example community physicians, midwives in rural communities or nurse practitioners in the North. Time and distance can inhibit access. One of the great advantages of Internet resources is that time and distance are no longer barriers to the request for and delivery of information. There are already many routes to health information services on the Internet, but knowing where to find these resources can be very complicated and intimidating.

The Consortium of Ontario Academic Health Libraries (COAHL) was formed in 1995 with the aim of optimizing access to information resources through collaborative projects. Composed of representatives from health libraries at Queen's University, McMaster University, and the Universities of Toronto, Ottawa and Western Ontario, the COAHL members had a vision to provide all health care practioners in Ontario with a single Web-based source to locate health information resources and services. The Ontario Health Link for Practitioners (OHeLP) is the realization of this goal. The aim of OHeLP is to facilitate access to health information services by creating and maintaining a single source of high-quality information resources that can be searched by type of service.

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COAHL presented a proposal for an Ontario health information gateway project to Associated Medical Services (AMS) in April 1997, and was approved for funding. The first task was to hire a project coordinator. Anna Gagliardi took up the position on a half-time basis in June 1997, with Neera Bhatnagar taking over in March 1998. The project was divided into six phases: planning, decision-making, Web site development, evaluation, full release and maintenance and further development.

Planning and Decision-Making

Since this was a consortial project, discussion and consensus were crucial. A listserv, "COAHLgate", was established to allow for communication, and the project coordinator made site visits to Queen's University and the Universities of Ottawa and Toronto. A number of issues requiring immediate decisions were identified. First of all, what was the service to be called? Although "Ontario Health Information Gateway" was the initial working title, COAHL members felt that the term 'gateway' was overused and did not reflect the nature of the project or its target audience. After much discussion, OHeLP was chosen to stand for "Ontario Health Link for Practitioners". Unfortunately the name does not lend itself well to a bilingual translation.

As well as a catchy name, there was discussion of a logo. However, no consensus could be reached on a symbol: the trillium was felt to imply a government flavour, a map of Ontario was not appealing or readily recognized, a caduceus might be associated with medicine and not with the other health care professions. In the end, a simple logo of the name "OHeLP" was chosen.

Essential to the planning of OHeLP was input from the intended users so decisions were also made regarding target and test groups. A needs assessment survey, developed with input from all COAHL members, was mailed to a number of test groups including midwives, oncology nurses, physiotherapists, family practitioners and nurse managers. The results revealed that many of the respondents felt a need for services that were, in fact, already available to them. Respondents also indicated that traditional library services such as document delivery, reference assistance and literature searching were still considered important. Of real need was assistance in locating 'good' health information resources and services which saved time. Particular resources identified included practice guidelines, quality information for patients, full text journals or abstracted articles, continuing education opportunities, treatment/disease information and access to expert colleagues.

Web Site Development and Release

There were a number of additional considerations apart from which services to include. The majority of survey respondents had access to the Web using graphical browsers, therefore the decision was made to develop an easy-to-use, Web-based resource incorpo-

rating minimal graphics to ensure the efficient loading of pages. A search engine was necessary to allow for targeted retrieval of resources and each service included in the site would be evaluated.

Two prototype Web sites were developed incorporating samples of services and information resources considered important by survey respondents. Although the survey was translated and distributed in French and English, due to budget, time and expertise constraints, the decision was made to first develop the site in English only. The project was presented to the Ontario Hospital Library Association members at the annual Ontario Hospital Association (OHA) convention in October 1997 and to the COAHL members in November 1997. A final working version of the site, incorporating input from OHLA and COAHL, and combining features from both prototypes, was mounted in January 1998.

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In this version, users could search for four major types of services: how to obtain mediated searches, how to conduct their own literature search, where to ask a reference question or obtain a copy of an article, and where to access continuing education opportunities. Upon further development, this list of services was expanded to include information on how to contact professional associations and government agencies.

Incorporating a mechanism to search the site and limit retrieval proved difficult. Although a searchable database of records for each service could be developed in various fashions, there were major cost and maintenance considerations associated with each strategy. In the end, ISearch, a product of CNIDR (the Center for Networked Information Discovery & Retrieval, *http://www.cnidr.org/ir/isearch.html*) was chosen. This system allows for searching of specific fields in Web documents as defined by metatags. OHeLP users can restrict searches by service, profession and/or geographical location. The site can also be searched by keyword and online help is available.

The greatest challenge was the identification of Web sites created by organizations who offer health information services and resources requested by health care practitioners. This is especially true for midwifery. The content of OHeLP is still rather lean but more organizations are continuously being added. Most Web services are identified by surfing the 'Net, reading professional journals including *BMC*, *BMLA*, *MLA News*, and *CMAJ*, and through word of mouth. Listservs such as CANMEDLIB-L and MEDLIB-L have also been very helpful.

Before any site is added to OHeLP, it must meet certain evaluation criteria. The need for filtering sites using a rating system is essential to help practitioners save time when locating good resources.

Before any site is added to OHeLP, it must meet certain evaluation criteria. The need for filtering sites using a rating system is essential to help practitioners save time when locating good resources. The rating criteria were compiled using concepts from various Internet rating scales. General Resources are evaluated for authority, content, currency, objectivity/disclosure and organization/layout. Any Internet search engines included must be easy to use, provide online help information, rank results with most specific first, include robust selection and indexing methodology, indicate a frequency of updating and offer advanced search capabilities. Internet subject directories must meet the following criteria: ease of use and logical organization, authority, objectivity or disclosure of purpose, links which are operable, comprehensive coverage, appropriate resources, and an indication that currency is maintained.

Web sites must offer current information to be added to OHeLP. Those which only offer background information about an organization are not included. However, if the organization offers a service to OHeLP's target groups, the specific Web page describing the service is included.

Maintenance and Ongoing Development

The goal for OHeLP is to be dynamic and to continuously evolve in order to address the needs of health care practitioners in Ontario. To this end, we actively seek input from Ontario health care practitioners and anyone who provides them with information services. Volunteers help by evaluating the Web site and providing necessary feedback when major changes to OHeLP are being considered. Those interested can fill out a form on the OHeLP Web site. Recommendations of sites or services for inclusion in OHeLP can also be submitted using an online recommendation form.

Spreading the word about OHeLP is a major task. It is very nice to have a great product or resource but it will sit idle if the potential users are unaware of its existence. In April 1998, OHeLP was presented at the annual meeting of the Association of Canadian Medical Colleges (ACMC). It was also discussed at an EFPO (Educating Future Physicians for Ontario) meeting at the end of May 1998. Many valuable contacts were made, including meeting with the Director of the Rural Ontario Medical Program.

We hope that if the health sciences programs in Ontario universities are aware of OHeLP, they will promote the site to their students. To inform potential users about OHeLP and how it works, an eye-catching brochure featuring the logo was developed.

The volunteers in our target groups who provided feedback for the prototype Web site were again contacted for suggestions on how to reach their colleagues. Some responded immediately indicating that they would publish information about the site in their local newsletters. For each target group we also assembled a list of relevant professional associations. Contact was made with the provincial chapter of each association. Many organizations contacted were very helpful and most agreed to include a paragraph or one-page article describing OHeLP in their publications. Some went so far as to offer to include our brochure in a mailing to their membership. A few of these organizations asked for money in exchange for including information about OHeLP in their newsletters. As we are on a limited budget, this was not a feasible option. Any associations holding

conferences during 1998-99 where our poster could be displayed were explored. It was felt that if potential users could speak to a project representative or view a demonstration of the Web site, the impact would be far greater.

Finally, let's not forget the most important resource available: fellow librarians! The project was presented at the annual CHLA/ABSC conference in Ottawa/Hull in May 1998. Another poster presentation was offered in October 1998 at the annual conference of the Upstate New York and Ontario Chapter of the Medical Libraries Association. Here colleagues were very interested and supportive of our efforts, providing us with valuable contacts and suggestions on how to promote the site. Most recently, OHeLP was included at the Annual Scientific & Business Meeting of the Ontario College of Family Physicians where participants experienced a hands-on demonstration. All COAHL members have also been promoting OHeLP to their constituents.

Funding for the OHeLP project was renewed by Associated Medical Services. Current objectives include further promotion of the service and addition of a counter to the Web site to track usage of the service. A major issue continues to be the identification of services available to health care practitioners in Ontario. Libraries need to expand their mandates to cover a wider range of users beyond those affiliated with their immediate institutions, associations need to provide services to their members and governments need to recognize the benefits of access to information for the efficient and effective provision of health care and to fund the services accordingly. Hopefully the new Network of Health Libraries initiative will address this issue.

There is little doubt in the minds of COAHL members that this is a valuable resource. The site is still in its infancy and will grow over time as more resources are added. We will continue to contact associations and organizations for the target groups and will consider expanding the target groups to include other health care practitioners. Our brochures are now making their way into the hands of potential users. Your ideas, feedback and participation in the project are welcome. Please visit OHeLP at *http://ohelp.mcmaster.ca* ■

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Forging a New Model for Cooperation

The Health Science Information Consortium of Toronto

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Introduction

The Health Science Information Consortium of Toronto (the Consortium) was formed in 1990 out of a desire to strengthen the relationship between the University of Toronto Library and the libraries in teaching hospitals affiliated with the University (1). Today, membership totals over thirty teaching hospitals, health care institutions and community hospitals in the Greater Toronto Area, stretching from the city core to Halton Region in the West, York Region in the North and Durham Region in the East.

From its inception, the Consortium flourished through several years of relative stability. Equitable and expedited resource sharing was one of the primary foundations upon which the Consortium was established. Interlibrary loan policies and practices were developed and refined. Members supported the Faculty of Medicine's curriculum renewal process and benefited from consortial discounts on document delivery and book purchases, rationalization of collections, participation in networking, sharing of information and expertise, as well as continuing education opportunities.

Threats and Opportunities

By the mid-1990's, however, the health care system in Ontario was coming under intense scrutiny, culminating with the provincial government's formation of the Health Services Restructuring Commission. Consortium members recognized that major implications for their parent institutions and, subsequently, their libraries were inevitable. In the face of these threats, several proactive measures were taken to address the potential impact of hospital mergers and closures, and ensure ongoing viability of the Consortium (2). Those measures included the formation of a task force to study the issues and make recommendations. As a result, external consultants were hired to devise a new membership model and fee structure. Outsiders might more easily find the solutions that seemed to evade the membership who were, it was thought, too close to the situation to be able to deal with it dispassionately. This latter strategy was adopted with what proved to be unrealistic expectations.

Ultimately, members found that the ability to handle the tough decisions and discover opportunities, in what seemed a dire situation, lay within their own numbers. An exciting new membership model, vision and strategic direction for the Consortium were forged in 1998 by a new task force. This task force, chaired by Carol Morrison of the Ontario Cancer Institute Library, consisted of representatives from each of the Consortium's five membership categories: fully-affiliated general hospitals, fully-affiliated specialized hospitals, partially-affiliated hospitals, community hospitals and the University of Toronto Library. A representative from the Consortium Board of Directors and the Executive Director completed the membership (3).

... membership totals over thirty teaching hospitals, health care institutions and community hospitals in the Greater Toronto Area, stretching from the city core to Halton Region in the West, York Region in the North and Durham Region in the East.

A New Direction

The Task Force was formed in late 1997 and was charged with making its final recommendations to the Board of Directors by the spring of 1998. The Consortium is indebted to all the members of the Task Force who worked very hard over a short period of time, and especially to Carol Morrison, who provided outstanding leadership to the group and ensured that the Task Force achieved all of its goals. The group's final report, approved by the Board of Directors in May 1998, affirmed the following vision for the Consortium:

The Health Science Information Consortium of Toronto leads in facilitating access to integrated knowledge-based information services in support of excellence in patient care, research and education.

Supporting the vision is the following mission statement:

We will work together and with other partners to continually improve the delivery of information services in all member institutions.

The Task Force established a greatly simplified membership model. In place of the five original categories, there are now just two: The University of Toronto Library, and all other members. The revised fee structure was similarly pared down, while providing a truly equitable formula. New membership criteria were also established, as well as the following strategic goals, which will lead the Consortium's priorities for the next several years:

The Consortium will strive to:

- promote excellence in library service;
- continuously improve access to electronic and print information services on a Consortium-wide basis;
- rationalize services and resources;
- collaborate with the Faculty of Medicine and other health science faculties to support teaching and research;

- ensure ongoing communication and information exchange among all members;
- involve the total membership in Consortium governance and activities;
- promote an awareness of the Consortium in the broader health care community and
- pursue appropriate fund raising opportunities.

The Future

Priorities for the Consortium continue to include cooperative resource sharing initiatives, most notably via full participation in DOCLINE by all members, collection rationalization, the pursuit of consortial discounts, and support for teaching and research. New initiatives include ensuring that member institutions have effective access to electronic information resources (including full-text journals), completing the design and implementation of the Consortium's new Web site, and exploring the feasibility of conducting a benchmarking study utilizing the CHLA/ABSC ***Benchmarking Tool Kit***.

Conclusion

A year ago, the Consortium was at a crossroads, faced with threats from many sides, and having to choose which path to take to ensure its survival. Happily, a path has been taken which, despite obstacles that are bound to appear from time to time, will lead towards an exciting future. ■

Notes

1. For an overview of the Consortium's founding, see Leishman, Joan L. *The Health Science Information Consortium of Toronto. **BMC*** 1991;13(2):96-99.
2. For greater detail on the Consortium's response to hospital restructuring, see Leishman J, Michael H, Scott L. *Partnerships for Progress : the evolution and future of the Health Science Information Consortium of Toronto. **Cooperation is the Key : How Biological, Medical and Life Sciences Librarians and Information Specialists Have Shared Electronic or Print Resources to Meet Users' Needs***. Proceedings of the Contributed Papers Session, Biomedical and Life Sciences Division, Special Libraries Association, 1998. *http://nucleus.cshl.org/CSHLlib/BLSD/Indianapolis/indianapolis_contrib_papers_1998.htm*
3. Members of the Task Force to Finalize a Membership Model and Fee Structure were: Carol Morrison, Ontario Cancer Institute (chair); Elaine Bernstein, North York General Hospital; Deborah Lambert, Scarborough Grace Hospital; Joan Leishman, Gerstein Science Information Centre, University of Toronto Library; Michael Moralis, Ontario Hospital Association, Consortium Board of Directors; Elizabeth Reid, St. Michael's Hospital; Laurie Scott, Consortium Executive Director.

Author Information

***Laurie Scott** has been Executive Director of the Health Science Information Consortium of Toronto since March 1997. She has a Master of Library Science degree from the University of Western Ontario, and a B.A. from McMaster University. Prior to joining the Consortium, she was Head Librarian at Atomic Energy of Canada Limited (AECL), Sheridan Park site, for seven years. She has also held positions with the Industrial Accident Prevention Association and the University of Manitoba. She is currently Continuing Education Coordinator for CHLA/ABSC and a member of the Contributed Papers Committee of SLA's Biological and Life Sciences Division.*

The Need For Evidence

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Patients, families, and society in general should expect the best possible health care from their clinicians, within reasonable limits of availability and resources. Best possible care is also the goal of all health professionals. Optimal care is sometimes difficult to provide because of the changes brought about by advances in health care research. An example where change has recently taken place is the cardioprotective effects of hormone replacement therapy for postmenopausal women. In the early 1990s, the data seemed convincingly strong in showing that the use of hormones would substantially reduce cardiac mortality and morbidity. Current research seems to indicate that although the hormones are protective for fractures, they may not have any substantial cardioprotective effects. Another factor making optimal health care difficult is the decision-making process during which clinicians balance the evidence to take into account patient preferences, specific situations, and their own experiences. Most often physician perceptions are accurate and the decisions made are the best possible in a given situation, but clinical experience must be firmly grounded in health care knowledge and fact.

Librarians ... have a role in providing and improving fast and reliable access to high-quality health care information.

This paper discusses some clinical situations in which researchers have measured the extent to which care in various clinical settings is based on clinical evidence. Librarians reading this paper will see that although much of the care provided is appropriate, we still have a role in providing and improving fast and reliable access to high-quality health care information. We also need to be aware that our own professional practice needs to be based not only on experience and knowledge, but also on sound research.

In 1963, Forsyth (1) evaluated the prescribing practices of 19 general practitioners in the United Kingdom. Analysis of his work led to the widely held belief that only 20% to 30% of care was based firmly on sound evidence (2). Since then many studies have shown that care is increasingly based on evidence. In 1995, Gill and colleagues (3) showed that general practitioners in the United Kingdom had doubled their efforts to practice medicine in an evidence-based manner from the levels reported by Forsyth: 31% of the decisions described were based on randomized controlled trial (RCT) data and 52% of decisions were based on convincing nonexperimental evidence. Only 19% of decisions were not based on evidence. Note that this 19% is not necessarily bad or inappropriate care because firm evidence does not exist for all the health care decisions that need to be made. In a study of Danish dermatologists, Jemec and colleagues (4) found a similar pattern of decision-making that was balanced on evidence: 38% of the decisions were backed by RCT data, 30% by other evidence, and 23% were not backed by evidence.

... studies have shown that the care provided by clinicians is increasingly being supported by strong evidence.

Ellis and colleagues (5) and Michaud and colleagues (2) evaluated the care that patients received on inpatient medicine wards. Their results were surprisingly similar. Using patient charts, they classified decisions into three categories: those based on strong RCT data, others based on nonexperimental evidence, and those not based on substantive evidence. The rates for the three categories in the study done by Ellis and colleagues in the United Kingdom were 53%, 29%, and 18%, respectively, and in the study conducted by Michaud and colleagues in Canada the results were 57%, 27%, and 16%, respectively.

Howse and colleagues (6) found similar encouraging adherence to evidence in surgery patients – 95% of patient care decisions were based on evidence: 24% from RCT data and 71% from other evidence. Data from pediatric surgery patients was similar. Baraldini and colleagues (7) found that in the United Kingdom, 26% of decisions were based on RCT data, 3% from other strong evidence, 68% on other nonexperimental evidence, and 3% on no evidence. Kenny (8), also in the United Kingdom, found lower rates of support: 11% of pediatric surgery decisions were based on RCT data, 66% on nonexperimental evidence and 23% had no substantial evidential support.

These studies have shown that the care provided by clinicians is increasingly being supported by strong evidence. The studies do not, however, tell us if care or outcomes have actually improved. One trial by Alexander and colleagues (9) provides a particularly sobering demonstration that the use of strong evidence in clinical settings can likely save lives. This study evaluates the care patients received during participation in the international GUSTO IIb (Global Use of Strategies to Open Occluded Arteries in Acute Coronary Syndromes) trial. The trial involved 7,743 patients with cardiac diseases in 373 hospitals in

13 countries. As part of the protocol, each patient's physician directed their care and could prescribe aspirin, β-blockers, angiotensin converting enzyme (ACE) inhibitors, and calcium channel blockers. Analysis at the end of the study showed that if the patients had been given the recommended (based on evidence) doses of the four drugs, lives would have been saved. If aspirin had been used as recommended, 9 additional patients of every 1000 patients treated would have been alive. For β-blockers, appropriate treatment would have saved 11 additional lives for every 1000 patients treated. For ACE inhibitors, 23 additional lives per 1000 treated would have been saved, and for calcium channel blockers, 13 additional lives per 1000 would have been saved. These results show that evidence-based decision-making can make potentially life-saving differences.

In summary, up to 30% of clinical decisions are already based on strong evidence (RCT data). To improve the quality of care even further, more effective and efficient information access tools need to be developed and better clinician/librarian partnerships should be fostered. It is a good time to be a health care librarian. ■

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Author Information

Ann McKibbon *worked in academic and special libraries before she came to McMaster University in the early 1980s. Since then she has worked in the Department of Clinical Epidemiology and Biostatistics on development of information resources and tools. Projects have included MEDLINE on the wards, the clinical hedges for directed searching, and production of the evidence-based journals (***ACP Journal Club, Evidence-Based Medicine, Evidence-Based Mental Health** *and* **Evidence-Based Nursing**).

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Cancer Patients Gaining Power

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Introduction

Windsor cancer patients are being given the chance to help themselves. Patients, who are already coping with the realities of a serious medical condition, can find accurate, reliable information to meet their specific needs. ***P.O.W.E.R. Surfers***, a locally produced Web site, has opened the doors of opportunity to cancer patients, giving them a chance to take part in their recovery [*http://www.city.windsor.on.ca/wpl/power/*]. The project, P.O.W.E.R. (Patients Online for Well-being Education and Research) Surfers, utilized the talents and resources of three local agencies: the Windsor Public Library, Hotel-Dieu Grace Hospital and the Windsor Regional Cancer Centre (WRCC).

... [P.O.W.E.R. Surfers] utilized the talents and resources of three local agencies ...

The vision for P.O.W.E.R. Surfers was conceived by Robert Holland, an active member of the Friends of the Windsor Public Library, who said that he became inspired after reading about cancer patients, and thought a Web site would help patients to contend with the ailment. The aim of the project was to create an easy-to-use Web site offering patients and their families precise and credible information about cancer care. It is difficult and stressful for users to sort through the overwhelming amount of information available on the Web. The community project's participating agencies provide Internet access and offer free training to consumers.

Development

Robert Holland, a local patient advocate, brought together a team of Windsor Regional Cancer Centre health care profressionals and librarians from the Windsor Public Library (WPL) and the Hotel Dieu Grace Hospital (HDGH), to create the initial pilot project working group. The librarians were responsible for the selection of links to be included on the first subject page – Cancer. Toni Janik (HDGH) and Daniel Noel (WPL) organized the links into the following categories: General Information Sites, Support Sites, Kids Sites, Breast Cancer, Prostate Cancer, Other Cancers, and Prevention, Treatment and Care.

The librarians were responsible for the selection of links to be included on the first subject page – Cancer.

HDGH librarians and cooperative education students wrote the content summaries for each link. These were compiled into a Patient Handbook and later distributed to each P.O.W.E.R. Surfer participating in the project. WRCC lead the task of developing informational posters and packages which were given to cancer patients at WRCC and local hospitals as an invitation to participate in the project. Posters were placed on community bulletin boards and were available at local patient health conferences. Radio, television and print sources of promotion were pursued with positive results. As of May 8, 1998, the pilot project status concluded when its success was recognized by the administrations from each of the three participating organizations.

Implementation

One key motivation for the project was to bridge the barrier of access to information by providing free access and training. Hence the desire to provide both computer instruction and free access to the computer terminals in each of the three organizations. Train the trainer sessions were set up before we launched the patient sessions to standardize our teaching styles.

At our first joint training class we hosted 20 patients and their family caregivers. During the first evening session, our computer novice patients were easily finding answers to their questions. Many expressed that the program gave them a new sense of hope with the ability to be involved in their care. After this initial session, patients booked computer-surfing time at the locale of their choice. Many came three to four times during the next few weeks, often bringing with them a new surfer, for which they themselves undertook the training. Many patients have formed their own supportive networks and are bringing in new 'Surfers' to the program.

One month after our initial patient training session we held a public launch of the program with the media in attendance. Patients were invited to attend and many agreed to speak about the program, all endorsing P.O.W.E.R. Surfers, with many commenting that they only wished it had been developed years ago. We purposely launched the patient and media sessions separately to protect the patients' confidentiality.

Outcomes

The first Surfers met on January 29, 1998, with a mere twelve computers, few patients and supporting staff standing by. Patients who attended the inaugural session were impressed with the quantity of information that was available at the click of a mouse. The word spread and

approximately 100 people attended a media event in the library auditorium one month later. Key speakers included patients who had used the P.O.W.E.R. Surfers site. These surfers were also interviewed on both radio and local television, and an article about the project was printed in ***The Windsor Star***.

This outreach from the community has given cancer patients new-found hope in dealing with the disease. Many are encouraged to 'chat' with other patients, which gives them the sense that they are not alone in their battle. Patients are encouraged by the level of support available from others who are coping with the same disease. Optimism and support are part of the healing process and are just as important as medication and other treatment.

Progress

In the beginning, surfers had their choice of only three different locations for Internet access and training: the Windsor Public Library, Hotel-Dieu Grace Hospital and the Windsor Regional Cancer Centre. As news of the site spread, many local clubs and organizations were more than willing to donate both equipment and services. As a result of the extreme kindness and support of the community, patients and their family caregivers can access the P.O.W.E.R. Surfers site at a growing number of community locations. Therefore patients can now surf at a location that is most convenient and comfortable for them.

Work is progressing on new directories with a target date of spring for an expanded Heart and Stroke site, in hopes of giving these patients the same opportunities to gain support and knowledge from survivors and other patients coping with the same daily obstacles.

One community has managed to make patients aware that they are not alone and has brought hundreds of people together, forming an irreplaceable bond. Just as Internet sites have links, the support, friendship, advice and, most importantly, the empowerment to challenge a deadly disease will forever link these surfers. ■

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The Web and Electronic Information (EI) in Canadian Consumer Health Libraries

Perceptions of Twenty Public, Hospital and Special Librarians

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Introduction

Leading up to the 21st century, Canadian patients and health care providers have become active collaborators and partners in developing national health care practices and policies (1). Consumers regularly read updated reports of standard treatment, medications, and alternatives via the Web, then consult their doctors. The emergence of lay health consumers as active participants in care has made the system more adaptable and receptive to changing needs, largely because involvement is at the grassroots level (2). The rise of the information-literate health consumer is an identifiable trend in several countries (3).

Now and into the next century, innovative patient programs will transform care. In Canada (as in the U.S.), hospital accreditation programs have moved to a patient-focus, bringing patient feedback into quality improvement processes (4,5,6,7). Hospitals are striving to be more modern and responsive to the needs of consumers (8,9) and problem-based curricula in Canadian medical schools have put patients at the center of learning (10). Health care policymakers at all levels of government are renewing models of patient care, be it hospitals, community doctors' offices, or local walk-in clinics, to meet Canadians' health needs (11).

Information professionals are integral to this patient-centered paradigm. Commitment to the broadest and most equitable information-access makes the information professional an ideal consumer advocate. From lay-level to research, consumer health librarians provide information that improves treatment decision-making for consumers and generally raises health awareness (12).

Furthermore, librarians can help facilitate patient-physician relations, as well as improve the quality of patient education activities. Many consumer health libraries in Canada continue to deliver patient services using print resources, but electronic information is increasingly the format of choice due to improved quality, speed, and convenience (13).

Purpose of Survey

The goal of the survey, envisioned, designed and implemented by the authors, was to examine the rise of the Web and electronic information sources such as CD-ROM in select Canadian consumer health libraries and information services. More specifically we wanted to examine how Canadian information providers:

- use, perceive, and integrate information technology into their services, and
- manage limitations and problems.

For many Canadian librarians the Web is an exciting supplement to reference service, and is utilized to deliver a full range of service, but not exclusively so. We hoped to uncover some philosophical issues associated with electronic information access and any attendant ethical concerns.

Method of Data Collection

The survey consisted of true/false questions and several statements associated with a five-point Likert scale, ranging from strongly agree to strongly disagree. The survey was distributed electronically to thirty-three consumer health information services and patient education libraries across Canada. In total, twenty surveys were completed for a 61% return rate. The survey method offers a snapshot of overall practices and policies of the responding libraries. Although not a scientific sampling, nor a comprehensive overview of consumer health libraries, the goal of the survey was to identify overall trends and not to establish library benchmarks. Nonetheless, the collected data is revealing and interesting, though inconsistent. We have used the results to make recommendations for further research and investigation.

Survey Findings

Use of Electronic Information Resources

Electronic information resources are used widely in library-based Canadian consumer health agencies. Nearly 90% of those responding use text-based Internet, graphics-based Web, or CD-ROM resources in daily activities.

Some respondents utilize in-house (Intranet) resources to locate appropriate consumer information, but also provide access to external sites, which is the more common scenario. PubMed via the Web and, occasionally, networked health databases, such as PsychLIT, CANCERLIT, and CINAHL, are commonly utilized by consumer libraries. In addition, consumer-oriented CD-ROM products on InfoTrac (Health Reference Center), Ebsco-Host and Healthwise are used. Newer products, for example a full-text product called Alt.HealthWatch by Softline Information Incorporated, remain on library desiderata lists.

Value of Electronic Information

Overall, more than 50% of the respondents stated that electronic information is very valuable to users, and integral to patient empowerment. The best Web sites are applauded for clarity, accuracy, and quality, and librarians lead consumers to the best health information available, when given the opportunity. Many responding librarians feel that this is the most valuable service they provide to users.

Electronic forums for online self-help are vital to health consumers. Information is shared, and consumers warn each other about problem Web sites, dubious information, and exploitive commercial lurkers (14,15).

Nearly 50% of the respondents have some reservations about electronic resources. The ability to assess and critically examine search results is crucial in locating relevant materials. Finding authoritative and reliable information is a major concern for both library staff and the informed consumer, as is information overload and confusion.

Information about alternative and complementary fields of medicine is plentiful on the Web, and is an invaluable source for consumers. Scientifically-valid sites offering access to the world's biomedical literature are more accessible than ever (PubMed), say respondents (65%), and are important for providing balanced views.

Obscure diseases and health problems are discussed in online databases, forums, Free-Nets and Web-sites, providing crucial linkages for sufferers and family members.

In some cases, libraries provide links to consumer sites, as well as to evidence-based free MEDLINE sites such as PubMed, as a means of providing further balance for consumers (16).

Access to Electronic Information

Canadian consumer health libraries almost universally provide some form of electronic information access or will be providing electronic information access within the year. Though print-based consumer information services are operating throughout Canada, libraries are increasingly providing access to electronic information in-house, or via referrals to local public libraries.

Overall, librarians (and volunteer-helpers) seem to navigate much of the Web-based consumer information, suggesting Web skills vary among consumers. A majority of responding libraries offer OPAC access (more than 70%) and most will provide training, support, and assistance, if requested.

On the issue of use, many (80%) say that electronic information is requested daily, or nearly daily. Fifteen percent of those responding said that use varies considerably, suggesting a small number of respondents primarily use print resources in reference service.

Philosophical Approaches to Electronic Information

No universal philosophy seems to emerge from the survey, but librarians agree that the speed, power, and efficiency of electronic information, be it via the Web or CD-ROM, is attractive. Some respondents (25%) feel that controls and restrictions to electronic information are required, be they firewalls or other technical barriers, so as to not upset, confuse, or mislead consumers. Leading consumers to the best information, or taking on the role of 'quality filterer' indicates that the staff of consumer health information agencies (70%) hope to develop superior navigational tools as well as evaluative and critical skills.

Consumer librarians are partners in the information age in Canadian health organizations, working more closely with information systems departments, for example, but issues of confidentiality, copyright, liability and literacy are of concern (17).

Best and Worst of the Web

The best Web sites, those defined as the most reliable and most-visited, state up front that they are affiliated with major organizations, say several respondents (45%). Furthermore, many of the best sites also emphasize that the information provided should not take the place of seeing a medical professional or be construed as medical advice. For a partial list of consumer Web sites most-often used by Canadian librarian respondents, please see our Webliography at the end of this article.

The worst of the Web, defined as sites which are unreliable, unmoderated or moderated by someone with few credentials, invariably involve commerce. Commercial transactions should be seriously evaluated, say many respondents (55%). Any site with misleading information, or marketing hype, should be critically examined (75%).

Many consumer sites focus on alternative medicine, and are frequented by individuals who are vulnerable or critically ill. Some librarians (25%) stated that sites developed or sponsored by pharmaceutical companies are a concern, as are those with .com as part of the Internet domain name.

Guides and Handouts for Locating Consumer Electronic Information Resources

A majority of respondents (50%) have not implemented an organized system of hard-copy handouts or guides but have developed in-house Web pages, bookmarks and other electronic indexes.

However, some (25%) suggested that print materials emphasize learning, make users comfortable in the process, and can be taken away for future consultation. Nearly 90% of respondents offer a service to print or copy Web pages, or furnish free take-home materials.

Workshops on Finding Electronic Information

Nearly all respondents (85%) say that one-to-one assistance is offered, but only 25% offer instruction to groups, perhaps suggesting that they are too busy. The real issue, say some respondents, is varying skill levels; there are equal numbers of beginners and experts, requiring a two-tiered training project.

Consumer Perceptions of Electronic Information

Many respondents suggested that the consumer perception of the Web is unrealistic, and that user expectations are too high. Specific consumer-oriented CD-ROM products, however, do not seem to set users up for the same kind of information discontent. With sophisticated controlled vocabularies and search engines, consumer-oriented CD-ROM products seem tailor-made to the needs of most patients, say respondents.

For news and media releases, the Web is a rich source of information. Many consumers want information instantly, and the Web often delivers. Several respondents (75%) indicate that the Web is very convenient and faster to use than a library of print books.

Alternative medicine seems to be well represented, but consumers need to be aware of the charlatan, quack, or trickster lurking on the Web, say respondents. Web sites promoting inaccurate claims or those wildly at odds with what is known scientifically should be pointed out to the consumer searching for accurate health information.

Teaching consumers about the Web and its limitations seems to be routine for most respondents (80%). Those librarians using in-house resources first, and the Web as a supplement, seem most critical of the Web's lack of organization. Some librarians (25%) report that consumers seeking answers on the Web can often find appropriate material on a library's reference shelves, but need to be shown. Traditionalists will no doubt feel vindicated by these discoveries.

Gender differences were observed by respondents (10%), suggesting that men and women use and perceive the Web differently. In general, women are perceived to be more fully involved in their health care, but men are most interested in harnessing computer power to stay informed.

Consumer lobby groups are common these days, and electronic information technology has made it possible for them to reach many consumers using e-mail and the Web. A small group of respondents (10%) stated that they help users to communicate with other consumers worldwide via e-mail. Many consumers are amazed at the untapped networking capabilities offered by the Web and e-mail (18).

Integrating Electronic Information Into Consumer Health

Many survey respondents (60%) think that consumers are consulting doctors more often, or most of the time, after conducting Web searches. Integrating newly acquired knowledge into consumer care is not always easy as patients are uncertain about how doctors will react (15). Some physicians receptive to Internet information are willing to examine it closely if patients present it to them in an organized and coherent fashion.

More than 40% of respondents say that while consumers are informed, they cannot always discuss Web information with health care teams. Michael Brown of Interactive Solutions, a U.S. company that conducts polls on Internet use in health care, says doctors do not want to spend time debunking inaccuracies found in cyberspace. Some doctors are uncomfortable with the loss of control that results when patients use the Internet. In Brown's survey, 60% of doctors said that the Internet was beneficial to them, but only 50% said that it was helpful for patients (19).

Negative comments from caregivers pose no deterrent to consumers searching the Web. In the United States alone, the U.S. Department of Health and Human Services reported that 15.6 million adults searched for online health information in 1997, corresponding to 43% of all Internet users; a significant finding (20).

"If you know what you are doing, and have a trusted guide", comments Molly Mettler of Healthwise Inc., "[consumers] can find real treasures." Librarians are ideal tour guides to help consumers navigate the land mines of unreliable health information on the Internet (21).

Future consumer health initiatives should offer consumers training in Web searching, informatics, and critical appraisal skills, as well as guidance for consultations with health care professionals.

Conclusion

The rise of consumer health is a worldwide trend. In Canada, new consumer health information services are being established all the time, and calls for comprehensive legislation to ensure broader information access auger well for future efforts (22). Libraries and information agencies in Canada have become strategic partners in consumer and patient education initiatives, and are helping to build information services to ensure access for all Canadians.

The rise in consumer health in Canada has created numerous partnerships. One such partnership is the National Population Health Clearinghouse (NPHC), renamed the Canadian Health Network. This project is designed to improve access to high-quality online health information, and to strengthen health promotion networks. The NPHC-CHN is being developed in phases. A Web site was released in June 1998, followed by toll-free phone access, faxback services, interactive voice systems and e-mail services in the fall of 1998 (23).

Delivering health care information over the Web creates a distributed learning environment, an ideal global forum for consumers. Consumer health networks are ideal communication tools that encourage inquiry, mutual sharing of information, and support. With proper controls in place, the Web can thrive and continue to be a virtual meeting place for health consumers.

Librarians can assume key future roles in the consumer health arena by participating in the development of Web resources. In Canada, librarians and information providers of consumer health are poised to meet the challenges of this new era proactively. ■

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Healthfinder *http://www.healthfinder.gov/*

HealthWeb *http://www.healthweb.org/*

Johns Hopkins Medical *http://www.hopkins.edu.jhu.edu*

Mayo Clinic [HealthO@sis] *http://www.mayohealth.org*

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Canadian Health Network : Recent Developments
November 1998

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The mission of the Canadian Health Network (CHN), formerly known as the National Population Health Clearinghouse (1), is to provide relevant, timely, and credible health information to Canadians.

CHN will be a national health information service with multiple modes of access: Internet, e-mail, fax-back, and a 1-800 call centre with live voice and pre-recorded messages/interactive voice response for particular client groups.

CHN seeks to enhance already existing networks of health information providers, not to duplicate existing services. While Health Canada is initially taking a leadership role in its establishment, the CHN will be an integrated health information service external to government that is jointly developed, managed and sustained by various partners. Currently the CHN's work is guided by a Consultation and Working Group with representatives from a number of health information providers across the country.

Health Canada has contracted Innovaction, a non-profit consulting organization affiliated with the Ontario Prevention Clearinghouse, to provide Secretariat services. The Secretariat provides administrative support to the activities associated with the CHN, supports the Consultation and Working Groups, and coordinates overall activities on behalf of the CHN. Innovaction will also manage the operational centre, whose function is to provide logistical and technical support for a distributed network of partners. The operational centre will be responsible for entering into collaborative arrangements with both affiliate and associate organizations, in consultation with Health Canada (2).

Highlights of recent developments at the CHN

Network Mapping

An examination of network mapping results has been completed. This analysis identifies key national, provincial and local providers of health information to Canadians. Summaries are in preparation and will be shared with contributing organizations.

Web Site [*http://www.canadian-health-network.ca*]

While development and expansion of content is an ongoing process, the prototype Web site currently links to approximately 1,000 resources from 100 partners. Resources can be searched by topic, region, demographic group or resource type, and FAQs are being prepared on a number of topics. Usability testing has been conducted involving an expert panel and a sample of English and French-speaking Canadians. Based on test results and feedback from visitors to the CHN site, the Web site is being redesigned.

Eastern and Western Regional Partners

Interested not-for-profit organizations have recently declared their intent to compete for the role of Eastern and Western Regional Partners. These partners will provide first contact for consumers, health intermediaries, and other information providers using state-of-the-art technology.

Affiliate Partners

The recruitment process for affiliate partners is underway. Affiliate organizations will have content expertise in a health topic and/or target group area. They will play a key role in supporting the CHN by providing expert advice and responding directly to consumer inquiries. They will be responsible for developing and supporting a network of associate organizations that provide content-specific information. Affiliate partners will be part of a distributed network of organizations providing data to support the ongoing development of the CHN Web site. They will also provide content to the Eastern and Western regional partners to respond to complex consumer requests using fax-back, call centre and/or interactive voice response (IVR) technologies (3).

Stay tuned for news of other exciting developments at the CHN this year! If you will be in Toronto on March 30, 1999, plan to attend an information session about the CHN at the Toronto Reference Library sponsored by the Toronto Health Libraries Association (THLA). For further information, contact THLA President-Elect Anita Lambert-Lanning at 416-603-5306 or *anita.lanning@utoronto.ca* ■

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Summary of the CHLA/ABSC Response to the Interim Report of the Advisory Council on Health InfoStructure, November 6, 1998

Introduction

CHLA/ABSC and health libraries were represented at the Advisory Council on Health InfoStructure (ACHI) National Conference on Health InfoStructure, February 7 to 9 1998, in Edmonton, and put forth a strong case for including knowledge-based information (and health libraries!) in their strategic plans for a national health infostructure. Impetus has also come from Jim Henderson and Joanne Marshall's earlier work and documents proposing a national network of health libraries, and from the CHLA/ABSC Vision Statement. At the 1998 Post-Conference Board Meeting, the CHLA/ABSC Board struck a National Health Libraries Network Steering Group to coordinate activities around this issue. The response to the ACHI interim report was developed by the Steering Group with input from both CISTI and the ACMC Committee on Medical School Libraries.

The CHLA/ABSC Board has developed a response to the Interim Report of the Advisory Council on Health InfoStructure/Conseil consultatif sur l'infostructure de la santé, with consultation from Jim Henderson, CISTI and the ACMC Sub-committee on Libraries. The response addresses the lack of reference to knowledge-based information as part of a health infostructure and outlines the need for a national network of health libraries in the context of the report's recommendations. It also emphasizes the role of health libraries and librarians in a Canadian health infostructure and as partners with other information creators and providers. The deadline for responses to the ACHI interim report was November 6, 1998.

The document below is a summary of the CHLA/ABSC response to the ACHI and should be taken in the context of the full report which can be viewed on the CHLA/ABSC Web site at [*http://www.med.mun.ca/chla/achi.html*].

A Role for Canadian Health Libraries

The ACHI and Health Canada are to be commended for their work on the development of a national health infostructure for Canada. For obvious and appropriate reasons ACHI has chosen to focus on technology as the foundation of such a system. However, there is a lack of any direct reference to, or acknowledgement of, knowledge-based information as an important resource for healthcare providers, decision-makers and consumers. Equally troubling is the seeming lack of awareness of the role librarians, particularly health librarians, play in the information process. Information by itself is not power. It is the ability to locate, acquire, interpret, evaluate and use information effectively within a specific situation or environment which leads to real power. Librarians are an essential part of this process, with both an informational and an educational role to play.

CHLA/ABSC recommends that ACHI and Health Canada establish a National Network of Health Libraries with a mandate and the funding to facilitate accessibility and use of knowledge-based information throughout Canada.

This Network will complement and partner with existing initiatives to create a comprehensive and dynamic health infostructure for Canada. Librarians have significant expertise in developing collaborative models designed to maximize resource accessibility to their users. Collaborative projects which illustrate this point include the Consortium of Ontario Academic Health Libraries (COAHL), Alberta's NEOS Consortium, the Health Knowledge Network coordinated by the University of Calgary and the University of Alberta, and the CHLA/ABSC Resource Sharing Task Force DOCLINE project.

There is also a need for a strong presence at the federal level to provide resources and leadership for a national network initiative. The development of the Scientific Knowledge Network (SKN) project at the Canada Institute for Scientific and Technical Information (CISTI) will provide a framework from which a national health library initiative could evolve and be supported.

CHLA/ABSC recommends that ACHI identify CISTI as leader and major partner in the National Network of Health Libraries.

Strategic Framework of a Health InfoStructure

There are a number of existing information structures and initiatives in Canada which could contribute to a strategic framework for health information. Canada has an excellent public library system which reaches into virtually every community across the country. A strategy which can build on this system and enhance its ability to deliver health information to consumers seems entirely reasonable. The Canada Connects project in our public libraries will ensure equality of access to information which is best delivered electronically and will also facilitate sharing of print information.

The following are examples of existing partnerships between public libraries and health care communities:

- Western Health Information Project [*http://ycn.library.ns.ca/hosp/health.htm*] is a collaboration of local hospitals and public libraries, Yarmouth Community Net and a school of nursing program which supports consumer and wellness information for the community.
- Rehabilitation Resource Centre, Hamilton Health Sciences Corporation, is a collaboration between the hospital and the Disability Information Service at the Hamilton Public Library.
- Consumer Health Information Service, Toronto Reference Library, offers a wide range of consumer health information and programs to on-site visitors and provincially through its 1-800 number.

A National Network of Health Libraries which could encourage and facilitate the development of such partnerships across the country would make a significant contribution to empowerment of the public while leveraging existing resources.

Integrating Health Services

The increasing ability of Canadians, even in remote locations, to access and use technology makes it possible to capitalize on projects that are technology-dependent. Possible projects include provincial or even national licensing of electronic databases, development and delivery of distance education programs for both health care providers and consumers, and the development and delivery of information. These are all difficult to accomplish cost-effectively on a local basis, but offer real potential when viewed in a national context as part of a broader telehealth project.

CISTI is pursuing, in addition to the SKN, a number of initiatives which demonstrate that it is well-suited to providing leadership at the national level. CISTI engages in collaboration with the National Research Council to build bridges between universities, networks and institutes across Canada using next-generation Internet technology. CISTI has also proven its commitment to training, education, professional development, and health information resource sharing through its role as the Canadian MEDLARS centre and DOCLINE coordinator.

CHLA/ABSC urges the ACHI to recognize in its final report and recommendations the importance of knowledge-based information and evidence-based practice to the quality and continuing development of Canada's health care system. We also urge you to clearly articulate and acknowledge the considerable role that health libraries and librarians must play in the establishment of a national health infostructure for Canada.

It is clear that all stakeholders and agencies must work together and seek innovative partnership opportunities if we are to succeed at providing health information equitably, cost-effectively and in acceptable formats to all Canadians.

The full response to ACHI was prepared by Lois Wyndham, Past-President of CHLA/ABSC and member of the CHLA/ABSC Resource Group for a National Network of Health Libraries. ■

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Evaluation of Serial, Union List and Resource Sharing Activities

RSTF2 Survey (Fall 1997)

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Introduction

The CHLA/ABSC Task Force on Resource Sharing was created at the Fall 1994 CHLA/ABSC Board Meeting to coordinate activities in response to emerging resource sharing issues for health libraries. Building upon the excellent work of the first Task Force, the Task Force on Resource Sharing 2 (RSTF2) sent all 1997 CHLA/ABSC Canadian members (n=339) a survey entitled, *Evaluation of serial, union list and resource sharing activities*, in late September of that year.

By October 3, 1997, 123 completed surveys were returned, and 122 (2 were from the same institution) were compiled for analysis. For the purposes of this survey, the 36% return rate provides a 'snapshot picture' of the practices and trends in resource sharing activities of the membership.

Who were our respondents?

What type of library are you working in? (Question 1)

Fifty five per cent of respondents are employed in a hospital library. The next largest category is academic libraries at 19%, with the remainder of respondents employed by government libraries, and the category "other", which includes treatment centres, research units, association libraries, and pharmaceutical libraries, to name a few (**see Figure 1**).

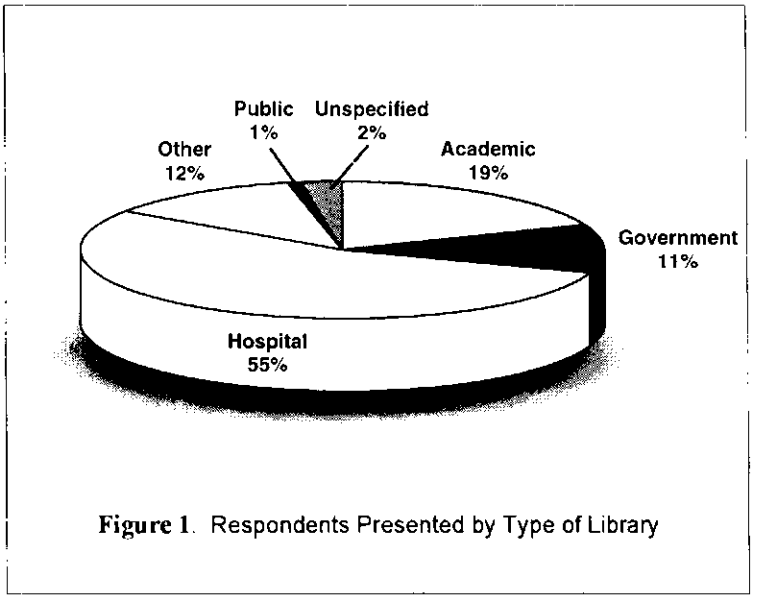


Figure 1. Respondents Presented by Type of Library

What is the size of your library holdings; number of current serial subscriptions? (Question 2a)

Sixty-one percent of the responding libraries subscribe to 250 journals or less, while 15% of responding libraries report collections of greater than 750 subscriptions (see Figure 2).

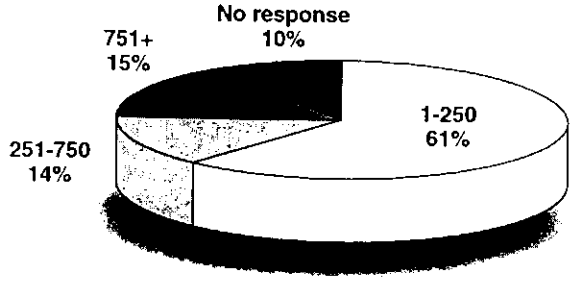


Figure 2. Responding Libraries Presented by Number of Current Serial Subscriptions

Number of library monograph holdings? (Question 2b)

Almost half of the responding libraries report a monograph collection of 1,001 to 5,000 items. One fifth report collections of more than 10,001 monographs.

Electronic Mail Access

Ninety-four percent of those replying have access to electronic mail, and almost all of them access it by Internet. Twenty-five per cent of libraries indicate that they are using Envoy 100 as well.

DOCLINE

DOCLINE is the U.S. National Library of Medicine's (NLM) automated interlibrary loan and referral system. Using serial holdings information contained in the NLM SERHOLD database, DOCLINE libraries can create ILL requests that will route automatically to participating libraries according to a routing table created when the library joins the system. DOCLINE libraries can also direct requests to specific libraries.

The growth trend in Canadian libraries participating in DOCLINE is continuing. As of February 1998, 134 Canadian libraries were participating in DOCLINE, while another 48 were in the application process.

Is your library currently participating in DOCLINE? (Question 10a)

One third (32.8%) of responding libraries are currently participating in DOCLINE.

Type of library currently participating in DOCLINE

Nearly 48% of responding academic libraries are DOCLINE participants, while 50% of responding government libraries use DOCLINE. Just under 30% of responding hospital libraries are DOCLINE participants, while 13.3% of other libraries use DOCLINE (see Figure 3).

Number of serial subscriptions related to DOCLINE participation

Twenty-four percent of responding libraries with serial subscriptions of 250 or less are DOCLINE participants while 52.9% of responding libraries with serial subscriptions of between 251-750 titles are DOCLINE participants. Just under 56% of responding libraries with greater than 751 serial subscriptions use DOCLINE (see Figure 4).

SERHOLD

SERHOLD is the National Library of Medicine's (NLM) database of machine-readable holdings statements for biomedical serial titles held by U.S. and selected Canadian libraries.

Are your holdings in SERHOLD? (Question 11a)

Fifty-three percent of responding libraries have their holdings in SERHOLD.

What route did you use for reporting to SERHOLD? (Question 12)

(From those 64 libraries who were reporting to SERHOLD, Fall 1997)

The two SERHOLD reporting routes used by the greatest number of libraries were the Canada Institute for Scientific and Technical Information (CISTI) at 46.9% and Paul Ward at 40.6% (see Figure 5).

AMICUS

AMICUS is the bilingual information system of the National Library of Canada (NLC). Access AMICUS is a fee-based search service allowing Canadian libraries and researchers to search the entire AMICUS database for cataloguing support, interlibrary loan purposes, reference, and information verification. Of greatest concern is that the holdings in AMICUS are not current.

Data collected regarding libraries reporting to AMICUS indicated that only a small number of libraries are reporting their holdings to AMICUS. While there may be several reasons for this, a major impediment for DOCLINE libraries is that their SERHOLD data is in a format that cannot be loaded into AMICUS. Therefore, if they wish to participate in DOCLINE and contribute to AMICUS, the holdings must be formatted and submitted twice.

Is there a role for AMICUS in health libraries?

Potentially, AMICUS can provide access to monographs, and to non-STM (scientific-technical-medical) journal titles.

Interlibrary Loan/Document Delivery

How many interlibrary loan requests to borrow did your library generate in the past 12 months (by type of library)? (Question 21) [see Figure 6]

How many interlibrary loan requests to lend did your library fill in the past 12 months (by type of library)? (Question 22)

A variety of ILL management software is used by libraries, including commercial products or in-house programs. Those libraries with larger journal collections, and libraries with a higher volume of interlibrary loan activity are more likely to be using an interlibrary loan management software. The two management software programs used by the greatest number of libraries are AVISO and Quickdoc.

Z39.50

Beginning in the early 1990's, vendors and software developers in Canada and the United States began to implement information retrieval systems based on the ANSI/NISO Z39.50 standard. Although implementation of the standard initially was slow, a recent survey of libraries and vendors conducted by National Library of Canada for its vCuc (Virtual Canadian Union Catalogue) project revealed that Z39.50 is being implemented in all types of libraries.

In terms of resource sharing and document delivery Z39.50 is potentially a very useful primary information retrieval tool because of its ability to search multiple remote library databases in a single session and its common interface across a variety of vendor implementations.

What is your level of understanding of the Z39.50 standard of information retrieval among library catalogues? (Question 22a) [see Figure 6]

Only 17.8% of respondents had intermediate/advanced knowledge of the Z39.50 standard, while the majority of respondents (82.2%) had preliminary or no knowledge (see Figure 7).

Is your library using a Z39.50 interface to search other library collections for document delivery purposes? (Question 23)

Only 10% of responding libraries report usage of Z39.50 for document delivery purposes, however 4% report Z39.50 usage for other purposes.

When does your library plan to implement Z39.50? (Question 24)

A quarter of respondents (25.3%) plan to implement Z39.50 within two years, while 22.8% intend never to implement the system. Half the respondents (51.9%) provided a variety of responses, with the majority replying, "Don't know", to the question about implementation.

If your library is not planning to implement Z39.50, please state why (Question 25)

Again, a variety of responses were offered, but several respondents indicated that further information was required.

Answers to the Z39.50 survey questions indicate to RSTF2 that, as the NLC survey revealed, there are a growing number of CHLA/ABSC libraries who will have implemented Z39.50 within two years. This fact, combined with the number of respondents who indicated the need for more information about Z39.50, provides RSTF2 with a clear mandate: to continue providing Z39.50 information to CHLA/ABSC members, especially those in smaller government and hospital libraries. In addition, it will be crucial to monitor future developments and enhancements, particularly regarding common standards for serial detailed and summary holdings that are so crucial for interlibrary loan activity.

Concluding Remarks

From the preliminary analysis, RSTF2 identified activities concerning communication and education as our priorities. Recognizing the importance of ongoing contact with the National Library of Canada (NLC) and the Canada Institute for Scientific and Technical Information (CISTI), RSTF2 organized a joint meeting with representatives from both institutions on February 20 1998. Our discussions from that meeting will also appear in *BMC*.

The Task Force welcomes any comments you may have concerning this report, or our work in general. ■

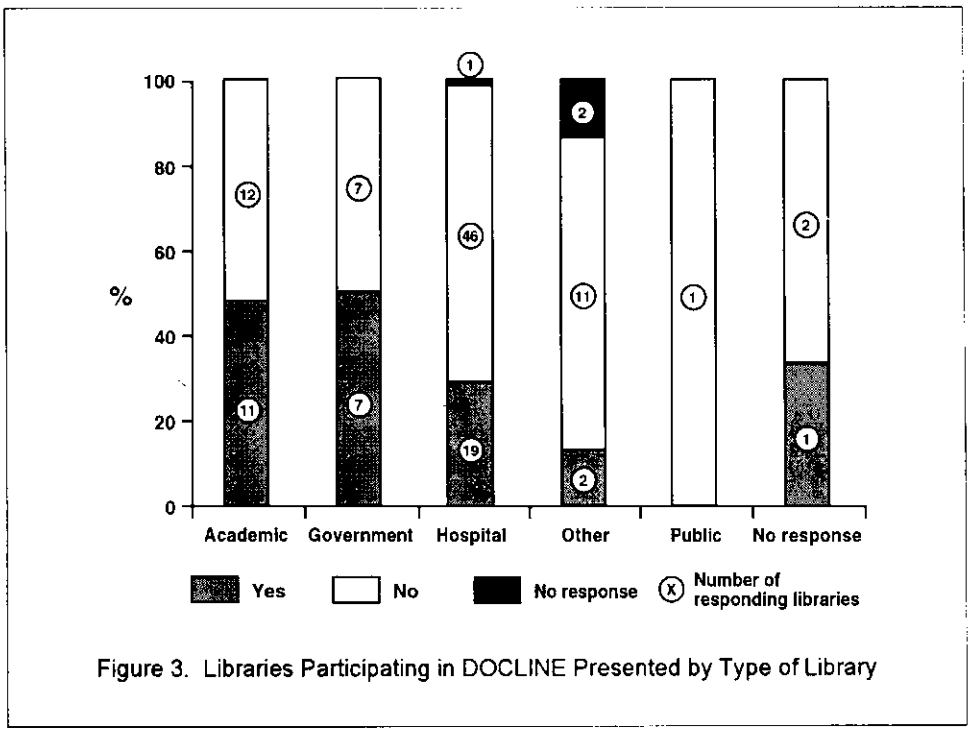


Figure 3. Libraries Participating in DOCLINE Presented by Type of Library

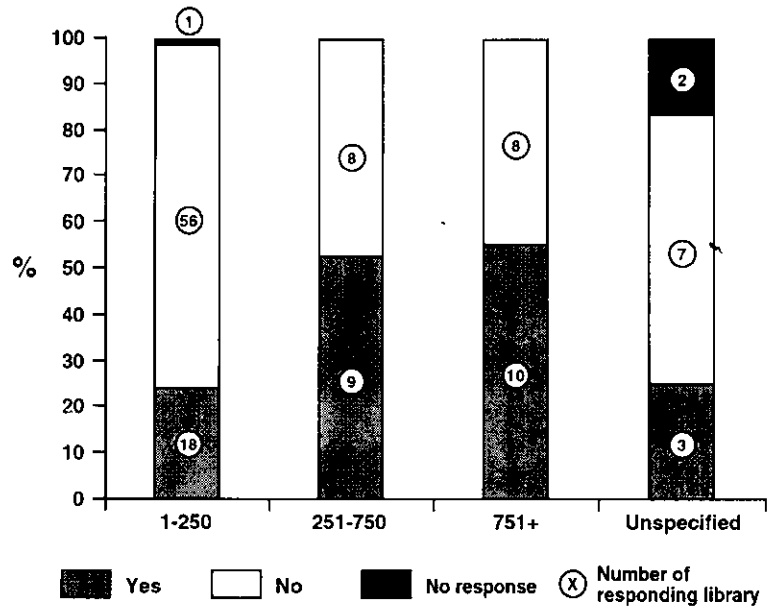


Figure 4. Libraries Participating in DOCLINE Presented by Number of Current Serial Subscriptions

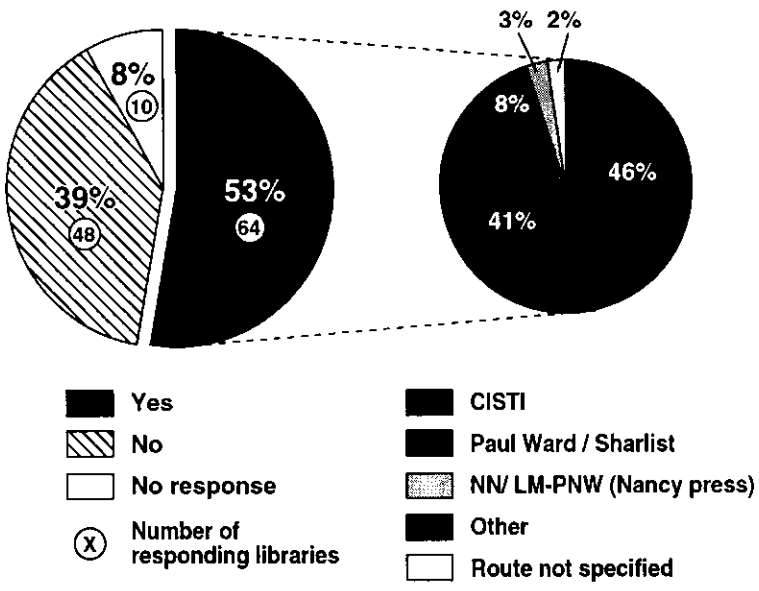


Figure 5. Number of Libraries Reporting Holdings to SERHOLD and Reporting Route

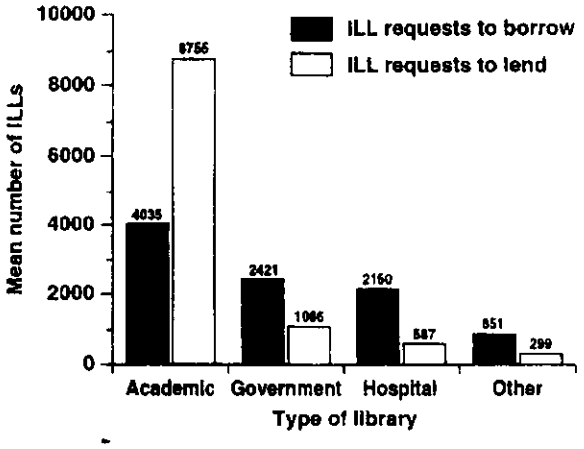


Figure 6. Number Interlibrary Loan Transactions Presented by Type of Library

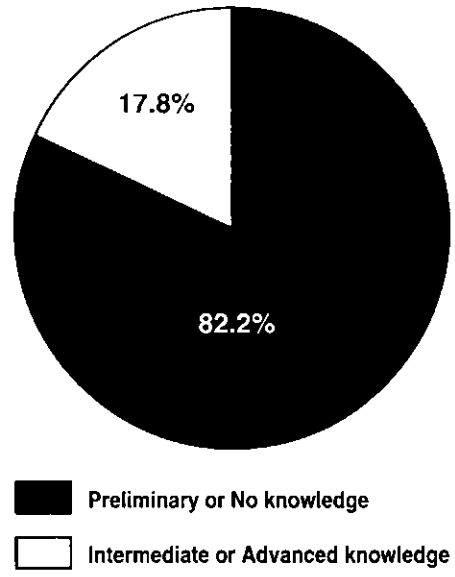


Figure 7. Level of Understanding of Z39.50

Author Information

Carole Brault *est responsable de la bibliothèque du Centre de Recherche du Pavillon CHUL du Centre hospitalier universitaire de Québec. Elle s'intéresse principalement au partage des ressources dans le milieu des bibliothèques de la santé. À ce chapitre, elle est active au sein de la section santé de l'ASTED ainsi qu'au niveau régional des bibliothèques de la santé de la région de Québec. Elle détient un baccalauréat ès sciences en microbiologie de l'Université de Sherbrooke, ainsi qu'une maîtrise en bibliothéconomie de l'Université de Montréal.*

Judith Coughlan-Lambly *is currently Head, Technical Services, W.K. Kellogg Health Sciences Library, Dalhousie University, Halifax, Nova Scotia. She is also a member of the Hospitality Committee for the CHLA/ABSC Annual Conference, May 25-29th, in Halifax, Nova Scotia.*

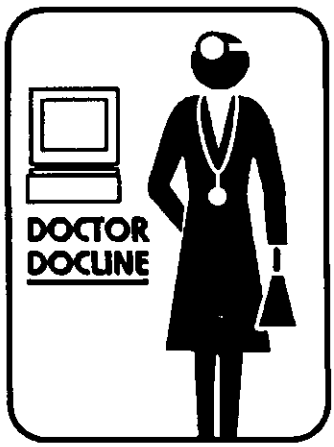
Toni Janik *is a Medical Librarian at Hotel Dieu Grace Hospital, Windsor, Ontario. She served as Chair of RSTF2, and was a member of the CISTI Subcommittee on Health Science Information. Recently she has been involved in expanding local resource sharing opportunities, development of patient-friendly Web sites and training programs, hospital library amalgamations, and designing a new library for 2001.*

Lynn Kozun *has been Manager of the Saskatchewan Health Resource Centre in Regina since 1986. She spent ten years as a reference librarian at Saskatchewan Provincial Library. Lynn was one of the founding members of the Saskatchewan Health Libraries Association.*

Anne Smithers *is the Head of Technical Services/Document Delivery at Bracken Health Sciences Library, Queen's University. She previously worked at the University of Alberta, in the Cataloguing Division and the John W. Scott Health Sciences Library.*

Ask Doctor DOCLINE

Bev Brown



Questions to *Doctor DOCLINE* are fielded by the CISTI DOCLINE Coordinator to answer queries that no manual or help screens seem to address. Direct your questions to:

Beverly Brown
DOCLINE Coordinator
tel: 1-800-668-1222
e-mail: cisti.docline@nrc.ca

Q: What are the DOCLINE quarterly statistics?

A: NLM provides all DOCLINE libraries with statistical reports on their library activity every quarter. The reports are for the periods January to March, April to June, July to September, and October to December. They are mailed the month following the end of the quarter. Reports contain:

1. Borrower statistics

A listing of libraries by LIBID that filled requests that you entered into DOCLINE. A summary report lists the total number of requests entered, the number filled and not filled.

2. Lender statistics

A listing of libraries by LIBID that sent requests to your library, including the total received by each library, the number filled and not filled. A summary report lists the total number of requests that your library received, the number filled, not filled, the number removed for non-receipt and the number removed for non-action.

3. Loansome Doc Lender statistics

For libraries accepting LD orders. A listing by LD user showing total number of requests received by your library, the number filled and the number not filled.

NLM posts a message on DOCLINE as soon as statistical reports are available. You can wait for the reports to arrive in the mail, or, if you have an FTP program and no firewall problems, you can transfer the file to your computer and format it for printing. The advantage of retrieving reports directly is that you will have them in electronic format weeks in advance of the copy sent in the mail, plus, you will have a copy should the mailed version go astray. Once NLM removes the reports, the information can no longer be accessed.

To retrieve the reports, FTP to the address MEDLARS.NLM.NIH.GOV. When prompted, enter your DOCLINE access code as your user name and your DOCLINE password as password. When announcing the availability of reports on DOCLINE, NLM provides the name of the dataset to be retrieved. The format for the dataset name is **DSPRINT.ABC99.Q9901** where ABC99 is your DOCLINE access code and Q9901 is the name of the file. Use the "get" command, followed by the dataset name in single quotes.

```
GET 'dsprint.abc99.q9901'
```

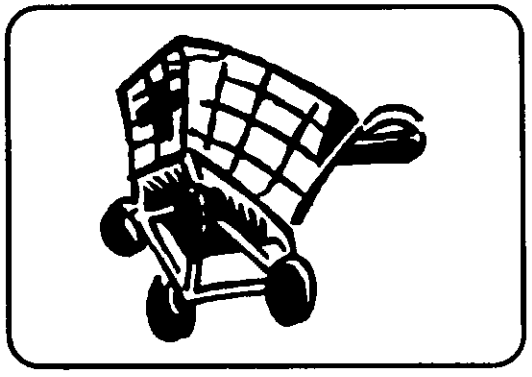
If you want to specify where the file will be transferred, add this information to the command. For example, if you want to call the file transfer docstats9901 and transfer it to a subdirectory called FTP on your computer, then the command line would be:

```
GET 'dsprint.abc99.q9901' c:\ftp\docstats9901
```

Once transferred, you will need to format the file so that it is legible. Bring the file into Word, WordPerfect or any other word processing program. Change the font size to courier 8 and change the orientation to landscape. Since page breaks embedded in the reports do not always fall at the end of pages, you may want to add and remove breaks as appropriate. ■

Consuming Health Information

Susan Murray



Susan Murray is the Director of the Consumer Health Information Service, Toronto Reference Library. Comments and suggestions can be directed to:

Susan Murray

E-mail: *smurray@mtrl.toronto.on.ca*

Consumer Health Books – If You Have $1100.00

This core list, containing a mix of consumer/lay language and professional texts, provides a basic collection of medical books that are useful in consumer health collections at an estimated cost of $1100.00. Prices are given in U.S. dollars unless otherwise indicated, and include taxes and an exchange rate of 56% for American currency.

Items were selected based on the following criteria:

- Books that were most heavily used by CHIS staff and users.
- A balanced selection of the above items was made; only one or two books were selected in each category even though in some areas, such as drug books, they are more numerous in the collection and receive higher usage.
- Some free items have been included.

This collection should address many of the consumer health questions received by public and health sciences libraries. For more complex health questions requiring additional sources, consumers are encouraged to phone the Consumer Health Information Service at 1-800-667-1999.

Dictionaries and Encyclopedias

Complete Canadian Health Guide. June Engel. Toronto: Key Porter Books, 1999. $29.95 Cdn.

The aim of this book published in 1993 was "to give people a concise, readable source of health information, and to arm them with the practical knowledge needed to sort through the mass of conflicting health pronouncements and make sensible, informed healthcare decisions." A new edition of this practical and easy-to-use guide that draws on material from ***Health News***, University of Toronto's award-winning newsletter, is expected in early 1999.

Miller-Keane Encyclopedia & Dictionary of Medicine, Nursing & Allied Health. 6th ed. Benjamin F. Miller. Philadelphia: Saunders, 1997. 1,960 p. $29.50.

"...combines the precision of a dictionary with the thoroughness of an encyclopedia...". Miller-Keane's reputation is based on two simple strengths: the accuracy of its entries, and a unique multi-disciplinary approach that encompasses all of health care today." Includes many useful appendices, for example, nutrient intake for Canadians.

Directories

Alternative Health Care : the Canadian Directory. Bonni and Craig Harden. Toronto: Noble Ages Publishing Ltd., 1997. 245 p. $19.95 Cdn. + $3.50 for GST/shipping (Noble Ages Publishing Ltd., 530 - 1543 Bayview Avenue, Toronto, ON M4G 3B5)

Described as "your resource guide to finding qualified practitioners, educational programs, and information on the Canadian alternative health care scene," this directory covers twenty major alternative health care fields. It explains each field, its benefits, questions to ask, government regulations, funding, national associations, and education and lists related practitioners.

Alternative Health Services Directory (Your Authoritative Resource Directory of Complementary Therapies, Products & Services) 1998. Bradford, ON: Alpine Print Management, 1998. Annual. 198 p. Free. (Alpine Print Management, 270 Colllings Avenue, Bradford, ON, L3Z 1W3. Tel: 1-800-831-9062 ; Fax: 1-905-778-1473)

A "yellow pages" for holistic health. Lists services primarily in the Toronto area and outlying Ontario communities (e.g. Richmond Hill, Whitby). Includes category and alphabetical indexes, as well as descriptions of alternative therapies.

Canadian Healthcare Sourcebook 98/99. 3d ed. Thornhill, ON: Sherwood Publishing Inc., 1999. (Annual). $94.95 + GST Cdn. with cheque or money order, $5.00 shipping + handling. (Sherwood Publishing Inc., 18 Sixpenny Court, Thornhill, ON, L3T 4E5. Tel: 905-889-8505; Fax: 905-889-4117)

Very useful source that identifies national and provincial health associations and organizations. Includes in-depth descriptions of over 125 associations and self-help groups concerned with medicine and health, government and professional resources.

Guide to Canadian Healthcare Facilities 1998/1999. Ottawa, ON: Canadian Healthcare Association. Annual. $127.95 Cdn

Provides a listing of Canadian hospitals, long-term care facilities, nursing and outpatient facilities arranged by province/city. Also lists healthcare associations, allied organizations and government departments. The Manufacturers, Products and Services guide, formerly a separate publication, is now included.

Ontario Self-Help Network Directory. Toronto: Self-Help Clearing House, 1998. $10.00 Cdn.+ $4.00 shipping. (Self-Help Clearing House, 219 - 40 Orchard View Boulevard, Toronto M4R 1B9, 416-487-4355).

Lists objectives, activities, meetings, membership information and other essential information about self-help groups in Ontario. Arranged by broad category with an alphabetical listing. The Self-Help Clearing House will assist in identifying self-help groups.

Pharmacy Practice : a Canadian pharmaceutical journal.

Publishes a listing of mostly Canadian health organizations. Includes address, phone, fax, e-mail, contact person (if available) and Web site for each organization.

Books on Drugs (Written for the Layperson)

Canadian Medical Association New Guide to Prescription and Over-the-Counter Drugs. 2d ed. Montreal: Reader's Digest Association (Canada), 1996. 592 p. $39.95 Cdn.

Lists more than 3,000 nonproprietary and brand names in an easy-to-understand chart format. Includes general information, information for users (such as dosage), possible adverse effects, interactions, special precautions and prolonged use. Also includes drug groups in relation to body systems and categories such as nutrition; A-Z of additives and basic first aid for poisoning, cardiac compression, seizures and shock.

Books on Drugs (Technical and Professional)

Compendium of Pharmaceuticals and Specialties. 34th ed. M. Claire Gillis, ed. Ottawa, ON: Canadian Pharmacists Association, 1999. Annual. $123.00 Cdn. Also available on CD-ROM from Login Brothers Canada; call 1-800-665-1148 for more information.

Commonly referred to as the ***CPS***, this guide lists more than 3,000 drug names. The main "white pages" listings, arranged alphabetically, are based on information received from the manufacturers and the Therapeutic Products Programme, Health Canada. Also includes *Brand and Generic Name Index*; *Therapeutic Guide* listing drugs by broad prescribing category, e.g. Affective Disorders - Tryptan (ICN); *Product Recognition Section* with pictures of many of the drugs; *Manufacturer's Index*; *Clin-Info* with selected information for health care professionals based on clinical practice and a review of the literature; and *Patient Information*. *Product News* provides a quick look at new drugs recently added.

Reference Books (Written for the Layperson)

Complete Guide to Symptoms, Illness and Surgery. 3rd ed. H. Griffith Winter. New York: Body Press/Perigree, 1995. 1,080 p. $16.95.

An easy-to-understand chart format that covers approximately 2,082 symptoms, 520 illnesses, and 171 surgeries. This "patient-advocate Bible" explains what happens to the patient, why it happens, what risks are involved, and what to expect in diagnosis and treatment.

Family Health & Medical Guide/the American Academy of Family Physicians. Robert B. Kelly, medical editor. Dallas: Word Publishing, 1996. 678 p. $29.95.

In addition to the primary role of educating family doctors, the American Academy of Family Physicians also strives to educate patients to become more informed about their health. This book provides information about body systems, and diseases and disorders that can affect them, emotional issues that individuals often face, how to prevent many illnesses, and screening tests that can save lives. Included are appendices on first aid, over-the-counter and prescription medicines, medical tests, and a medical dictionary.

Merck Manual of Medical Information : Home Edition. Robert Berkow, editor-in-chief. Whitehouse Station, NJ: Merck Research Laboratories, 1997. 1,509 p. $29.95.

"...the home reference version of The Merck Manual... contains virtually all of the information in the physicians' version, but is written in easy-to-understand, everyday language with a reader-friendly format."

Reference Books (Technical and Professional)

Harrison's Principles of Internal Medicine. 14th ed. Anthony Fauci, et al. New York: Mc-Graw-Hill, 1998. 2 v. 569 p. $143.55 Cdn.

Provides an overview of internal medicine and an encyclopedic, up-to-date reference that incorporates recent research. Contributors are specialists in their area. Although the book is aimed at practitioners and is quite technical, it provides in-depth information not found in the family health encyclopedias.

The Patient's Guide to Medical Tests. By Faculty members at the Yale University School of Medicine. Barry L. Zaret, et al, eds. Boston: Houghton Mifflin, 1997. 620 p. $40.00.

Written by a team of distinguished physicians at Yale University, this is a well-organized, comprehensive guide to medical tests that will be understood by the average consumer.

Professional Guide to Diseases. 6th ed. Springhouse, PA: Springhouse Publications, 1998. 1,330 p. $39.95.

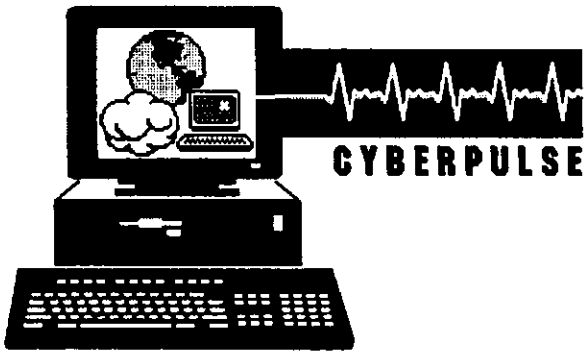
Provides reliable and comprehensive information on nearly 600 disease processes in a concise and easily accessible format. Groups diseases by categories and first provides a general overview. For specific diseases, there is a summary of general considerations, causes, signs and symptoms, diagnosis, treatment and special considerations. Though aimed at the professional, this is clearly written for, and of interest to, health consumers.

Physicians' Guide to Rare Diseases. 2d ed. Montvale, NJ: Dowden Publishing, 1995. 1,080 p. $141.40 Cdn.

Provides information about almost 700 rare diseases based on the National Organizations for Rare Disorders database. Each section contains an overview article, disease description, synonyms, signs and symptoms, cause, epidemiology, related disorders, treatment and sources of further information. ■

Cyberpulse

Rita Vine



Rita Vine is Marketing and Instruction Coordinator at the Gerstein Science Information Centre, University of Toronto. Copies of Cyberpulse columns are available at the Web site:

http://www.imr.on.ca/cyberpulse/cyberpulse.htm

Comments and suggestions for future columns are welcome and should be directed to:

E-mail: *rita.vine@utoronto.ca*

Ten Tips for Working Faster on the Web : Part One

Do you get annoyed and anxious waiting for pages to load in your browser? Do you endlessly fiddle with mountains of e-mail in your in-box, only to find that you missed a deadline because an important message has trickled down to the bottom of your list? Do you spend inordinate amounts of time trying to pull together documents, data, presentations and Web site information from many different folders on your computer? Do you feel like you're working slower and less efficiently now than you were before you had a computer and Internet access?

If you can answer 'yes' to any of these questions, you're probably like many active Internet users who are struggling to effectively manage increasing amounts of e-mail and information retrieved from Web sites. Recent studies indicate that the average Internet-enabled worker in Canada spends over seven hours a week online. It's reasonable to expect that librarians working in a Web-enabled environment spend much more time online than that, so that it's even more important to make every minute count.

Here are some tips for saving time and ensuring that Internet work time is more productive and efficient.

Set up a default home page in your browser for your favorite search engine or subject catalogue.

Do you usually begin your search with a search engine or subject catalogue? If you're like most Web users, you probably start with your favorite search tool every time. Why not set it as your default home page so that you don't have to type the Web address into the location bar every time you want to use it? In Netscape use the PREFERENCES feature and in Internet Explorer use the OPTIONS menu item to make a favourite tool your default Web page. Then each time you launch your Web browser it will load as the default home page and a quick click on the HOME button will return you to it for your next search.

Invest in software to help manage large numbers of URLs.

Netscape Bookmarks and Internet Explorer Favorites are great tools for collecting small numbers of Web addresses, but they lack important searching features, are cumbersome to annotate, and are annoyingly difficult to import into other programs like Microsoft Word.

Several shareware products have been developed to help Internet power users organize, manage, and annotate large numbers of URLs. I use Kaylon's Powermarks [*http://www.kaylon.com*], a great shareware program that allows you to fetch Web site meta-information including meta-tagged descriptions and keywords. You can import Bookmarks and Favorites into Powermarks, and the software allows you to create instant lists of Web addresses for importing into other documents. You can download a fully-enabled trial version of the software from the Kaylon Web site.

Buy a copy of Adobe Acrobat to create instant Web-enabled copies of your library brochures, user aids and handouts.

You probably already have the free Acrobat Reader, which enables you to read Adobe PDF-formatted documents available on the Web. If you want to create your own Acrobat documents, you need to purchase a copy of Adobe Acrobat. The software is available at most large computer software retailers, or at the Adobe Web site [*http://www.adobe.com*]. 'Street prices' are almost always lower than the Manufacturer's Suggested Retail Price, so shop around.

When installed (the installation is easy), Acrobat acts as a super-duper print driver, enabling you to instantly create PDF documents from existing word processed documents and other desktop publishing applications. With a little extra work, you can index your Acrobat documents to include a table of contents, so that the reader can jump between sections easily. As an example, check out the Gerstein Science Information Centre's PDF version of our Faculty Handbook at *http://www.library.utoronto.ca/www/gerstein/*. We indexed the document and also created instant Web links for all the URLs, so you can jump directly from the PDF document to the Web site.

Why create PDF documents? Well, you can quickly mount a PDF file on your library Web site without having to convert the

document to HTML, which can be a time consuming and tedious task. You can also attach PDF documents to your email message; they are much smaller than equivalent Word documents and their format cannot be easily altered by a user. Therefore they are a better option for transmitting information that should appear as it was formatted.

Learn to use your right mouse button when browsing the Web.

Depending where on the screen you click when using a browser, a click of the right mouse button will display a context-sensitive menu of choices. You will see navigation options, shortcut creation options, bookmarking options and more. For example, you can save valuable seconds by using the BACK option in the right mouse button menu rather than sliding your mouse up to the BACK button in the browser toolbar. Sound like nitpicking? Add up all the times you click on that BACK button and watch your efficiency improve – and your wrists will feel better too!

Learn to use Windows really, REAAALLLY well.

As a trainer of librarians, I'm always surprised to learn how few of my students know about valuable Windows shortcuts, auto-minimizing of multiple windows, and the CUT, COPY, and PASTE commands that can be used both within and between Windows applications. Even fewer know about the incredible power of dragging and dropping, and the difference between doing it with your left and right mouse buttons! Almost no one uses keyboard shortcuts, which can save valuable time, over mouse-driven pointing and clicking.

Take a tip: Click on the START button at the bottom left corner of your Windows 95, 98 or NT 4.0 screen, select HELP, then click on the INDEX tab, and type the word 'tips' in the box. You'll see a list of valuable tips for Windows. Read all of them and try them out. You'll learn tricks that you probably never knew, and you'll be well on your way to working faster and more confidently. ■

Editor's Note: Part Two of 'Ten Tips' will appear in the next issue of *BMC*.

Currents in Library Research

Compiled by Mary E. Robinson

Bulletin of the Medical Library Association
• **Volume 86 Number 4**

Homan MJ. *Digital libraries initiatives.* [Editorial]

Lipscomb CE. *100 Years of MLA : views from the Bulletin.* [Editorial]

Vishwanatham R. *Citation analysis in journal rankings : medical informatics in the library and information science literature.*

Stone VL, Fishman DL, Frese DB. *Searching online and Web-based resources for information on natural products used as drugs.*

Obst O. *Use of Internet resources by German medical professionals.*

Spang L, Marks E, Adams N. *Health Sciences Information Tools 2000: a cooperative health sciences library/public school information literacy program for medical assistant students.*

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Health Libraries Reviews
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Consumer health resource centers : a guide to successful planning and implementation. Mary E. Longe, Karen Thomas. Chicago: AHA Press, 1998. 180 p. $25 US. ISBN: 1-55648-231-0.

In November 1998 there were a flurry of comments on the MEDLIB (including a message from MLA President Jacqueline Doyle) and CAPHIS (Consumer and Patient Health Information Section of the Medical Library Association) listservs about the new American Hospital Association monograph Consumer Health Resource Centers by Mary Longe and Karen Thomas. Concerns were raised that the book sent a message to hospital administrators that professional librarians were not needed to mount a consumer health information (CHI) service and resource centre. Longe and Thomas are the current President and former Vice President, respectively, of collection development at Longe Life Libraries, a company that designs, installs, and maintains fully functioning health resource centres (HRCs) for businesses and health care organizations. Longe is also a health educator who created the community health and women's health sections at the American Hospital Association. Thomas is a senior analyst in the American Hospital Association's health technology assessment division and senior editor of the Hospital Technology series.

The authors do not specify a recommended audience, but this book is not intended for a professional librarian. It is suitable for other professionals (nurse educator, health promotion and patient education staff) who may be overseeing the CHI centre in a health care organization. The purpose of the book "is to provide the information needed to design, manage, and maintain [CHI centres]." The information and recommendations, drawn from Longe Life Libraries' experience in developing hundreds of CHI centres in the United States and Canada since 1986, are focused on the design and maintenance of an American health care organization's consumer health resource centre. The HRC is viewed as an integral part of an organization's health information distribution strategy.

The book is divided into six chapters: an overview of CHI centres, strategic planning and marketing, facilities and design, media collections development, operating the CHI centre, and staffing and budgeting. Brief appendices (pages 155-171) include examples of public relations materials (announcement letters, news releases), criteria for donated items, clip art, media evaluation form, and instructions on how to conduct a community health assessment. The book contains useful marketing ideas from which anyone developing or maintaining a CHI centre could benefit. However, I question whether some of the ideas, for instance, producing a video or starting a book club, are feasible considering the competing demands on CHI staff. A handy checklist of minimal space and equipment specifications is provided, including a quick-and-dirty guide to estimating the required shelving space to house a CHI collection.

The chapter on media collection briefly reviews the variety of print and electronic CHI resources with several examples of each category. A serious omission is the lack of a citation to Alan Rees' 1998 ***Consumer health information source book*** (1), now in its fifth edition, a key resource that evaluates and recommends an extensive range of current print and electronic CHI resources. Also missing is mention of the CAPHIS Web site and listserv. The Web site [*http://www.njc.org/caphis/*] includes a CHI core list, directory of information on approximately 70 CHI services and instructions for subscribing to the listserv.

The chapter on operating a resource centre describes practical organizational issues, such as the ordering of library supplies, lending procedures, cataloguing, bar coding and security systems. Unless the CHI centre is connected with a library that uses a traditional cataloguing system, such as Library of Congress or Dewey Decimal System, the authors recommend the Longe Life consumer-friendly classification system for ultimate convenience. CHI centres can contract with Longe Life Libraries to receive pre-catalogued and pre-processed material. The system is based on three-letter 'intuitive' categories, for example, CAN = Cancer, PRS = Prostate Health, AER = Aerobic Exercise. The underlying assumption is that volunteers and users can easily navigate this system without professional assistance. The authors neglect to mention the Planetree Classification System, a user-friendly scheme designed specifically for a consumer health collection (2) that has been very successfully used in CHI centres since 1981. The Planetree Classification system was discussed this year on both MEDLIB and CAPHIS listservs (3).

Staffing recommendations are the most controversial aspect of the book. Staff roles are separated into three broad categories of leadership, management and day-to-day operations. In the authors' opinions, leadership can initially come from a clinical unit, marketing department or medical services, in other words, someone who can shepherd the CHI centre concept through organizational channels. According to the authors, the manager should be a part-time or full-time paid employee with "excellent organizational skills, expertise in supervision, marketing, and content areas of the [CHI centre]." The job description is similar to that of a librarian although librarians are not mentioned.

With regard to the day-to-day operations, the authors breezily proclaim "the good news is that day-to-day operations in [CHI centres] usually need not be performed by a professional librarian." The authors feel that professional librarians are necessary in technical capacities, for example, when a CHI centre is part of an interlibrary loan system, uses LC or NLM cataloguing, or uses an automated library management system with MARC records. Indeed, the authors seem to feel that it would be rare to find a professional librarian who understands the role of the CHI centre within the organizational structure.

I believe that the authors wildly underestimate the difficulty of operating a CHI centre with volunteers. "Recruiting volunteer staff members is relatively easy ... the ideal volunteer is articulate, empathetic, discreet, conscientious, and detail oriented." Suggestions to ensure the success of a voluntary staff in running a CHI centre include: "Choose a user-friendly cataloguing system such as the one designed by Longe Life Libraries, outsource part or all of the processing of [CHI centre] materials. Many of Longe Life Libraries' clients choose to have all media delivered preprocessed..." Since most hospital-based CHI centres will largely be staffed by volunteers, I find the authors' suggestions extremely self-serving.

Mary Longe responded to the MEDLIB discussion on November 19, 1998. She provided background information about Longe

Life Libraries and gave her side of the staffing issue. Longe maintains that she tells clients to involve librarians from the beginning, and has used librarians in the development of the resource centres she has set up. The problem, she insists is that "the department people in health care organizations are looking for a service to be installed and not to get steeped in the bureaucracy. They want it fast, simple to use and in place by opening day (sometimes only days away...we call them emergency libraries.)" She states that "medical librarians in most cases were and are involved in the process but many times their areas have been downsized to minimal hours and they want to outsource the development of a new service." I have found quite the opposite in Canada: medical librarians are often the catalysts for a CHI centre in their organization and are involved in its development and operation. While I recommend ongoing involvement of professional librarians to ensure the most effective operation of a CHI centre, the reality is that this is not the case in some organizations.

Although the book is meant as a practical guide and not a research tome, it fails to recommend useful resources. The slim bibliography of fourteen items is drawn from newspapers, American Medical News, American Hospital Association publications, and other assorted resources. Only two items are library-related: a 1987 monograph about book-selling and a 1992 book on the organization and operation of small libraries.

There are few practical guides on CHI centres and those that exist are no longer available for purchase. Some recent guides include:

- the 1991 AHA publication Consumer Health Information: ***Managing hospital-based centres*** by Salvinija Kernaghan and Barbara Giloth, regrettably out-of-print and in my opinion, a far more useful book on the topic (4),
- declaring some conflict of interest, my 1995 publication, ***Developing a consumer health information service : a practical guide***, just now going out-of-print with a possible new edition in the next couple of years (5), and
- ***Managing consumer health information services***, a 1991 publication edited by Alan Rees that provides practical guidance with respect to the development and operation of CHI services, that is also out-of-print (6).

Would I suggest this book for purchase? Despite my critical comments, this book contains some useful suggestions for marketing, collection development and other handy tips on a variety of topics. Yes, I am concerned about the "no need for a librarian message", but given the lack of other guides on the topic, I would give this modestly-priced volume a cautious and marginal 'thumbs up'. However, use it as supplementary reading material, keeping the book's limitations in mind. In my opinion, the most useful strategy for anyone setting up a CHI centre is to consult with others who have developed CHI services, join CAPHIS and use the listserv, and read extensively and broadly in the area of consumer health information. ■

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Our promise to children. Kathleen A Guy, ed. with preface by Fraser Mustard, Dan Offord, Karen Goldenberg and Susan Young. Ottawa, ON: Canadian Institute of Child Health. 1997. 197 p. ISBN 0-919747-48-5. $18.00 Cdn.

Our promise to children is "a collaborative effort that draws on the work of scores of researchers, community leaders, government officials and professionals." Contributors to the book include: Dr. Dan Offord, Director of the Centre of Studies of Children at Risk; Dr. Fraser Mustard, Founding President of the Canadian Institute of Advanced Research; and Kathleen Guy, Child Advocacy Consultant. This book takes a comprehensive look at the care of our children and the long range outcomes that effective child care and development will have on the future of our economy and society.

The premise of the book is that our children are a national resource. Therefore, the care of children is not just a parental responsibility but the responsibility of society as a whole. The book discusses social issues such as child poverty, abuse, divorce rates, education, preventive health care, and community actions and initiatives.

The book is divided into three sections. Each section is well referenced and is highlighted with inserts and interesting stories. This makes the book useful for both quick reference and in-depth review. Readers are granted permission to reprint parts of the publication as background for conferences, seminars, and classroom use with appropriate credit to Health Canada.

Section I is entitled, *How do children develop*, and covers topics such as the nature of brain development and the effects of various stimulants on child development. The contributors review several studies that validate the importance of quality care during the early stages of development. This section outlines the interrelationship between economic and social goals, stating that Canada's ability to prosper in the Information Age will be dependent on its ability to invest in human capital. The development of social cohesion and stability in a rapidly changing world is a key challenge for all Canadians.

Section II describes *The four determinants of optimal child development*: protection, relationships, hope and opportunity and community involvement. A large number of environmental and social issues are briefly covered in this section, however, the majority of issues covered are not new. Work and family stress, divorce, violence, nutrition, economic disparities, and many other

social issues are presented as determinants of optimal child development. There are several examples of community partnerships and programs which have been developed to improve the social environment for our children, such as parent support programs, the Collaborative Student Mediation Program to help reduce playground violence, and Babies Best Start Program for low income families.

Section III, We can make a difference, provides excellent examples of existing community programs which foster social cohesion and stability for children and families. A community checklist is provided to assist communities in addressing their specific needs and identifying their unique resources. The final chapter of the book presents the case for taking action now. Each member of society, including parents, business, government services, politicians, and the media, can play a role in developing our children. The authors provide several suggestions for each potential partner.

Several appendices provide excellent background information: an extensive bibliography, a listing of relevant Canadian organizations, updates on current Canadian research projects, and a synopsis of the state of Canada's children.

Our promise to children is easy to read, well organized, and informative. An excellent analysis of the social and long-term consequences of early child development, it is recommended for libraries or organizations with an interest in community programming for children, parents, teachers, or child care-givers. ■

Order this book from:

Canadian Institute of Child Health
512 - 885 Meadowlands Drive
Ottawa, Ontario K2C 3N2
tel: 613-224-4144
fax: 613-224-4145
e-mail: cich@igs.net
url: http://www.cich.ca

Note: Ce livre est aussi disponible en francais sous le titre, ***Notre promesse aux enfants***, ISBN 0-919747-49-3.

Jill Campbell
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Clinical ethics : a practical approach to ethical decisions in clinical medicine. Albert R. Jonsen, Mark Siegler, William J. Winslade. 4th ed. New York: McGraw-Hill, 1998. 208 p. ISBN: 0-07-033120-0. $40.00 Can.

The latest edition of this popular Brandon-Hill recommended text offers an improved layout. A locator section at the beginning of the text provides quick reference to topics in clinical ethics. The remainder of the book is organized in four sections:

- *Medical indications*: medical problems of the patient, diagnosis, prognosis and goals of treatment.
- *Patient preferences*: a patient's expressed preferences, mental capacity, advanced directives and ability to cooperate.
- *Quality of life*: prospects for return to a normal life and deficits that might be experienced if a course of treatment proceeds.
- *Contextual features*: family issues that might influence decisions and cultural, religious or legal factors.

In their introduction the authors explain that most cases encountered by health professionals will require a consideration and application of these four topics. The approach might be termed "holistic evidenced based medicine."

Clinical Ethics includes some examples of cases in American law. For a Canadian context and examples from Canadian law, the CCH ***Canadian Health Facilities Law Guide*** is available and should be substituted for this section.

Earlier editions of this text were written mainly for physicians, however the authors have realized that in the modern hospital, with the advent of program management and patient-centred care, many other health professionals as well as the patient now contribute to discussions of diagnosis, treatment and consequent decisions.

I recommend that all library staff read this short text. It provides context to the clinical decisions and responsibilities that are faced every day by health care teams. ***Clinical ethics*** is an essential text for clinical ethics courses and is also a highly readable text for hospital ethics committees. It is recommended for purchase. ■

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New Elsevier Science BIOtech Web site

In December, Elsevier announced the launch of the BIOtech Web site, a gateway to information about its scientific publications, databases in biotechnology and a bibliographic database of biotechnology articles. This information is provided for free.

The intent of this Web site is to keep investigators and information specialists informed about publishing initiatives of the Reed Elsevier organization in the field of biotechnology. Information is provided on print publications, electronic information services (available through hypertext links), and all formats of data manipulation.

For each of the more than 235 journals published by Elsevier, the user can retrieve tables of contents, a list of editorial board members, statement of aims & scope, manuscript submission instructions and subscription information.

Visit this Web site at:

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http://www.elsevier.com/locate/biotech

ELECTRONIC POCKET-SIZED MEDICAL TEXTS

Microinfo of the UK has recently introduced the Pocket PDR® Medical Book System (MBS). This device is small enough to fit in the hand and can provide access to medical information anywhere.

According to Microinfo, this battery-powered unit has an easy-to-read screen, instruction display and dimensions of 14 x 9 x 2 cm. A variety of exchangeable "Book Cards", that fit into slots on the unit, are available. Book Card titles include: ***Pocket PDR®***, ***The Merck Manual***, ***Harrison's Principles of Internal Medicine : Companion Handbook***.

Six nursing titles are also available.

Cost of the unit is approximately £112.00. The medical titles range from £62.00 to £89.00.

New Database Field in Sydney*PLUS*

International Library Systems has developed a new Internet address field for its library automation software, Sydney*PLUS*. This additional field provides more streamlined access to the Internet. It is now possible to create a Web link field, including URL's, e-mail addresses, FTP sites, etc., and therefore, to access Internet resources directly from within the library catalogue.

New Databases from ISI®

The Institute for Scientific Information®, (publisher of ***Current Contents*** and ***Science Citation Index***) has announced a new series of citation databases, the ***Web of Science Corporate Editions***, which is specifically tailored to meet the needs of researchers in the biopharmaceutical and chemical fields.

The first three, corporate-focused citation indexes are now available for trial and subscription: *Chem Sciences Citation Index™*, *BioSciences Citation Index™*, *Clinical Medicine Citation Index™*.

OCLC and WLN Merged

OCLC Online Computer Library Center, a nonprofit, computer library service and research organization, serving more than 33,000 libraries in 65 countries and territories, has merged with WLN, a nonprofit corporation providing services to 550 libraries in the Pacific North West.

The merger became effective as of January 1, 1999. WLN will benefit from cataloguing services, shared resources and reference services. OCLC will gain expertise in authority control and collection analysis, as well as the inclusion of the Pacific Northwest Network.

The CHLA/ABSC Planning Committee extends a warm Maritime invitation for you to attend the

23rd ANNUAL CONFERENCE OF CHLA/ABSC 23ième CONGRÉS ANNUEL

of the

CANADIAN HEALTH LIBRARIES ASSOCIATION / ASSOCIATION DES BIBLIOTHÈQUES DE LA SANTÉ DU CANADA

*** 25 - 29 May/mai, 1999 * Halifax, Nova Scotia, Canada ***

This year's theme, *A Bridge to the New Millenium - Un pont vers l'an 2000*, has insipred a wide-ranging and very topical programme which includes an excellent roster of invited speakers.

- Jane Beaumont, widely known in the library and information science field in Canada, will examine health sciences librarianship in the 21st century;
- Dr. Robin Whyte, Faculty of Medicine, Dalhousie University, will discuss the Cochrane Collaboration and systematic reviews;
- Dr. Fiona Bergin of the Health Law Instutute at Dalhousie will address legal and ethical issues facing health care professionals;
- David MacNeil, founding member of the Board of Directors of CA*Net and on the Board of Directors of CANARIE, will enlighten us on the prospects of CA*Net II, Canada's advanced, high-speed Internet;
- Dr. Ron Stewart and Mary Jane Hampton, both formerly of the Nova Scotia Department of Health, will offer an insider's view of successful lobbying; and
- Dr. Jean Gray, currently Associate Dean of Continuing Medical Education of the Dalhouasie School of Medicine, will address some of the issues surrounding consumer health information for Canadians.

The Continuing Education portion of the programme offers the following, fully accredited sessions.

- Dianne Pammett on *Library advocacy for health science libraries*,
- Scott Rogers on *How to design an effective web page*,
- Ann McKibbon on *A librarian's primer on systematic reviews*,
- Judy Inglis on *Benchmarking : where do we go from here*,
- Marcia Dorfman on *Do-it-yourself mediation*,
- Susan Murray on *Evaluation of consumer health information resources*, and
- Jay Daly on *QuickDOC for Windows : introductory workshop*.

For full details on the programme, how to register and other information about the Conference, please visit ourWeb site at:
Pour plus de renseignements, visitez notre site web à:

http://www.library.dal.ca/chla-absc99

While conferences afford an opportunity for learning new things, they also offer opportunities for fun and socializing. The Hospitality Committee is busy ensuring the 'fun' quotient at this year's Conference will be very high and sure to please. See you in Halifax this May.

Please note that late registration fees will be in effect after April 18, 1999.

CHLA/ABSC HONORS AND AWARDS

Please keep in mind the following deadlines for CHLA/ABSC Honors and Awards. For more detailed information on criteria for these awards, please see the CHLA/ABSC *Directory*, or the contacts listed below.

Tenth Anniversary Commemorative Award

Deadline: April 15, 1999.
Send to:

Marthe Brideau
CHLA/ABSC President
Bibliothèque des sciences de la santé
Université de Sherbrooke
Sherbrooke, Province of Québec J1H 5N4

Twentieth Anniversary Professional Development Grant

Deadline: none
Send to:

Dianne Pammett
CHLA/ABSC Director, Public Relations
National Research Council Information Centre
C.I.S.T.I. - Plant Biotechnology Institute
110 Gymnasium Place Saskatoon
Saskatchewan S7N 0W9

CHLA/ABSC Development Fund

Deadline: At least one month before the next CHLA/ABSC Board Meeting. Meetings are normally held in February, June and October.

Send to:

Marthe Brideau (as above)

Student Paper Prize (see also below)

Deadline: March 31, 1999
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Gagnez 300 $ Comptant/Win $300 Cash

ET votre article sera publié dans *Bibliotheca Medica Canadiana (BMC)*

Le concours pour **le prix du meilleur article d'étudiant** est ouvert à toute personne poursuivant des études ou récemment diplômée en bibliothèconomie, en informatique, en techniques de documentation et autres programmes connexes. Les étudiants peuvent être inscrits à plein temps ou à temps partiel. Il faut que les articles soumis étaient écrit alors que le concurrent était encore aux études, ou au cours de la première année apres obtenir le diplôme.

On doit faire parvenir le tout à:

Concours du meilleur article d'étudiant
ABSC/CHLA
P.O. Box 94038, 3332 Yonge Street
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Les mises en candidature doivent être postées au plus tard **le 31, mars 1999**.

AND have your paper published in *Bibliotheca Medica Canadiana (BMC)*

CHLA/ABSC's **Student Paper Prize** is open to all full or part-time students in or recently graduated from a library or information sciences program, a library techniques program or a program in a related faculty. The article must be written while the student is enrolled in the program, or within one year of graduation. Multiple-author papers are eligible. Only one prize will be awarded, divided evenly amongst all authors.

Submit entries, **postmarked no later than March 31, 1999** to:

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See CHLA/ABSC *Directory* for complete details. Pour plus d'informations, veuillez consulter l'*Annuaire* ABSC/CHLA.

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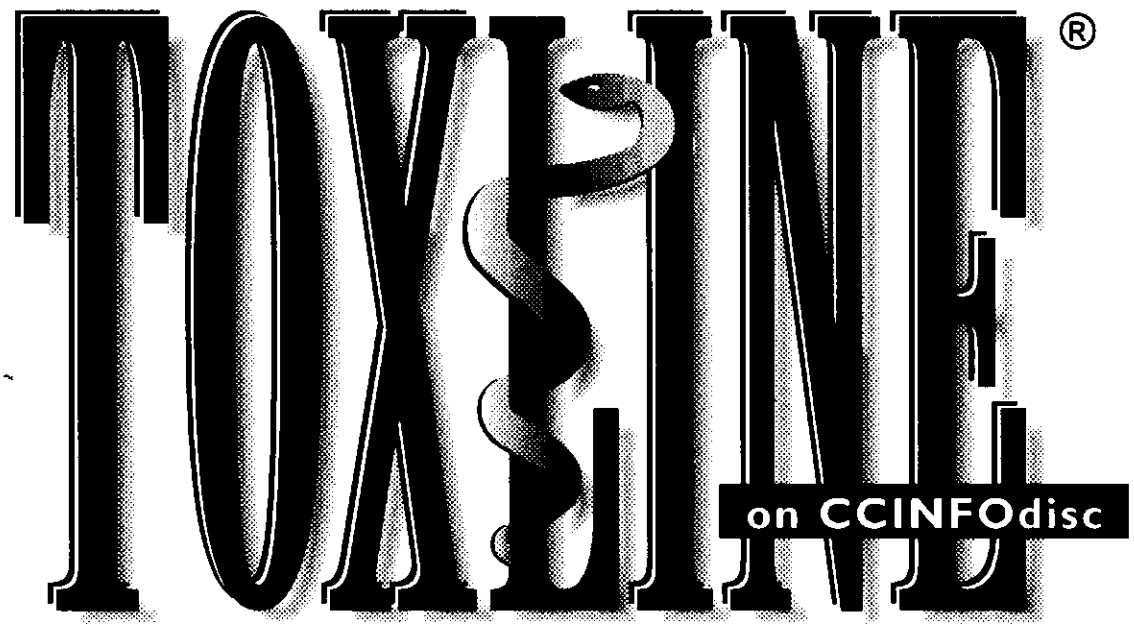

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